

Improving Well-Being in Acute Care Nurses Post-Pandemic

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Abstract

The aim of this scholarly project was to educate healthcare professionals on how to identify burnout and provide organizational opportunities for improving well-being in acute care nurses. Burnout is one of the highest contributors to nursing turnover and has been compounded by the pandemic. Poor well-being can lead to negative outcomes for nurses, patients, and employers. Sixty-five percent of nurses felt burned out according to the *2020-2021 Healthcare Well-Being* report. The DNP project primarily focused on implementing an evidenced-based well-being program (*Wellness Wednesday*) that incorporated different weekly activities that included identification of burnout, internal resources for employee wellness, promotion of self-care, and improving well-being. A pre- and post-implementation survey was sent to nurses that included questions from a validated Nurse Well-Being Index (NWBI) scale. Methods for study included the unpaired t-test for statistical measure and descriptive statistics.

The NWBI scores did not significantly decrease post educational intervention, however there were many positive outcomes of this DNP project. The education proved to be beneficial for participants as evidenced by a 14% improvement in scores for knowing the symptoms of burnout, a 24% increase in participant's feeling that the organization cares about their well-being, and an 18% increase in participants feeling more comfortable speaking to their leader about well-being. For nurses to be able to adequately care for others, they must first feel supported by their leaders and organization (National Academies of Sciences, Engineering, and Medicine [NASEM], 2021). The importance of nurse well-being and the focus of preventing nurse burnout has now become a more normal talking point at the project site and this DNP project was the catalyst for this change. Sustainable change has been evidenced by the official designation of each Wednesday as *Wellness Wednesday* at the organization.

Keywords: burnout, self-care, nurse well-being, well-being, turnover, wellness

Improving Well-Being in Acute Care Nurses Post-Pandemic

Organizations must prioritize professional health and develop a culture of wellness. Poor well-being can lead to burnout, mental health conditions, addiction, and suicide (Melnik, 2020; Munn et al., 2021). Professional burnout is described as “loss of enthusiasm for work, feelings of cynicism, and a low sense of personal accomplishment” (Bodenhiemer & Sinsky, 2014, p. 574; Rushton et al., 2015, p. 413). Burnout is one of the highest contributors to nursing turnover and has been compounded for healthcare workers during the COVID-19 pandemic having increased responsibility, long shifts, and nation-wide staffing shortages (Well-Being Index [WBI], 2020a). In 2018, Delaney reported 40-60% of healthcare workers experience burnout at some point in their career. In the *2020-2021 Healthcare Well-Being Report*, 65% of nurses felt burned out within the past month, thus confirming the need for prioritizing actions that improve staff well-being (WBI, 2020a). Well-being is multi-factorial and includes individual (personal and spiritual), environmental (workload and staffing), organizational (leadership, education, and culture of safety), and psychosocial (emotional support and safety) variables (Munn et al., 2021). Houck (2014) emphasized the importance of prevention and suggested that education regarding emotional health should be a mandatory competency for nursing. It is important for nurse leaders to be proactive and create an environment that supports and prioritizes the normalization of professional well-being and resilience.

Background

The concept of caring for the caregiver is not new. In 2014, Bodenhemier and Sinsky suggested the Triple Aim be expanded to the Quadruple Aim to place emphasis on improving the work environment for healthcare workers. The American Nurses Association (ANA) (2015) *Code*

of Ethics (2015) states in *Provision 5*:

The nurse owes the same duties to self as to others, including the responsibility to promote health and preserve wholeness of character and integrity, maintaining competence, and continue personal and professional growth (p. 19).

Furthermore, *Provision 5.2* states the nurse has a duty to “promote personal health, safety, and well-being” and when not made a priority, “compassion fatigue can affect professional performance and personal life” (ANA, 2015, p. 19). The COVID-19 pandemic has had a significant impact on well-being worldwide and mental health issues in healthcare workers are underrecognized and under-addressed (Spoorthy et al., 2020). Luo et al. (2020) found that frontline nurses had the highest psychological distress among healthcare workers and are more prone to stress as they care for patients and handle traumatic events frequently (Delaney, 2018; Falatah, 2021; Lara Guedes et al., 2021). Poor well-being contributes to compassion fatigue and can lead to nurses leaving the profession, adding to an existing problem of a nursing shortage.

Problem Identification

Increasing burnout and job dissatisfaction impact organizational quality outcomes and patient safety. In 2011, McHugh et al. reported that 25% of nurses are dissatisfied, whereas the *2020-2021 Healthcare Well-Being Report* stated 1 out of 3 nurses report dissatisfaction with their current work environment (WBI, 2020a). Nurse dissatisfaction threatens patient safety when nurses miss important changes in their patient’s condition and can be magnified for nurses with increased workload demands, compassion fatigue, and/or burnout (McHugh et al., 2011). The *2020-2021 Healthcare Well-Being Report* states nurses with a high level of distress (NWBI > 2) are:

5.5 times higher risk of burnout, 3.5 times higher risk of leaving their current job, 2.5

times higher risk of performing below average in their current job duties, 2.5 times higher risk of experiencing severe fatigue, and 2.5 times higher risk of having a poor quality of life. (Dyrbye, et al, 2018b; WBI, 2020a, p. 10)

Outcomes Affected by Poor Well-Being Scores

Additionally, national studies have found linkage between well-being index scores and healthcare related outcomes of medical error and personal outcomes such as suicide (Dyrbye et al., 2018a). Bourgault (2019) noted that nurses have the highest rate of suicide and drug abuse compared to other healthcare workers. Negative quality and safety outcomes associated with healthcare worker burnout include lower patient satisfaction, diminished health outcomes, decreased productivity, poor staff engagement, and increased risk for workplace injury due to fatigue (Arrogante & Aparicio-Zaldivar, 2017; Falatah, 2021; Bodenheimer & Sinsky, 2014; Perlo et al., 2017). Therefore, it is imperative that healthcare leaders build resilient workforces to ensure high-quality care is given and clinical outcomes of patients are of highest priority.

Turnover Rates

Nursing Solutions Incorporated (NSI), the national guidelines for nurse staffing, report current nurse turnover rates at an all-time high of 20% (NSI, 2021). The average cost for each registered nurse (RN) turnover is \$40, 038 (NSI, 2021). If structures to help improve well-being prevents twenty RNs from resigning throughout the year, the organization is looking at a cost savings of \$800,760, making the project both clinically and financially significant. Additional cost savings include not having to hire contract employees to maintain adequate staffing during periods of high turnover (Munn et al., 2020).

Well-Being, Burnout and Resilience

Munn et al. (2021) found that participants who asked for well-being resources were at a

greater risk for poor well-being. The researchers suggested that “workers who seek out such resources might already be feeling highly stressed, less resilient, and in need of help rather than simply seeking to protect their well-being” (Munn et al., 2020, p. 33). In a national poll asking nurses what practice or program contributed to the greatest improvement in resilience and well-being for them, respondents ranked wellness/resilience support as the second highest contributor (Experience Innovation Network, 2016). Mallak (1998), as cited by Rushton et al. (2015) defines resilience as “the ability to adapt coping strategies to minimize distress” and includes “adopting ways of thinking that lessen the impact of traumatic experiences” (p. 413). Rushton et al. (2015) confirmed that the inverse association between burnout and resilience is strong. Leaders must acknowledge these findings and build a nursing culture where well-being practices include resilience training and are routinely accessible for frontline workers.

Current Initiatives

Recent attention on mental health and well-being has led to a few initiatives by nationwide healthcare organizations but there is a gap in getting such programs and education to the bedside nurse. Nurse leaders need assistance in providing these valuable resources to the frontline staff. During the pandemic, the Institute for Healthcare Improvement (IHI) developed an evidence-based tool titled *Psychological PPE* (personal protective equipment) for frontline staff that promotes clinician mental health and well-being (IHI, 2020) (see Appendix A).

The ANA promotes physical and mental health by adding well-being as a *Pathway to Excellence* essential element for creating a positive practice work environment (American Nurse Credentialing Center [ANCC], 2020). ANA created a *Healthy Nurse Healthy Nation* initiative to connect and engage nurses and organizations around improving health in five areas: physical activity, nutrition, rest, quality of life, and safety (Healthy Nurse, Healthy Nation [HNHN], 2022).

The *Healthy Nurse Healthy Nation* initiative declares that by creating a healthy nurse population, we in turn create a healthier workforce, a more effective, safe, and sustainable health care system, and function as role models of health (HNHN, 2022). Research suggests that self-compassion interventions may provide protective factors and enhance resilience (Delaney, 2018). Munn et al. (2021) confirmed that resilience helps healthcare workers combat the trauma experienced each day on their jobs and can help protect well-being. Creating a positive work environment that focuses on well-being leads to improved staff satisfaction and can have a positive influence on long-term healthcare outcomes impacted by high turnover.

Implementing a program where nurses develop an understanding of resilience and well-being will help acute care nurses better manage the inherent daily stresses that they face, as well as improve their ability to identify symptoms of burnout and state available resources both internally and externally from the organization. By utilizing evidence-based interventions from the ANA's *Healthy Nurse, Healthy Nation*, ANA's *Well-Being Initiative* framework, and IHI's *Psychological PPE*, the program will be innovative, and nursing focused (HNHN,2022; IHI, 2020).

Project Question

Poor well-being can lead to negative outcomes for nurses, patients, and employers. Acute care nurses frequently provide care to patients that experience traumatic events, thus are at an increased risk for developing high levels of burnout and compassion. Without an intervention to focus on improving well-being and resilience, acute care nurses will suffer dissatisfaction and may choose to leave the profession. The consequences of nurses with high levels of burnout, compassion fatigue, and poor well-being are high turnover rates resulting in higher costs to the organization, and decreased quality of care, leading to poor patient outcomes. The project

question seeks to determine if an educational initiative focusing on improving well-being will result in a statistically significant change in the nurse well-being index (NWBI) scores for acute care nurses. The purpose of this scholarly project is to decrease the level of burnout and dissatisfaction and increase the well-being of acute care nurses by instituting a well-being educational initiative within the organization. The clinical question of this scholarly project is:

Does implementing a well-being program improve Nurse Well-being Index (NWBI) scores in acute care nurses during the 4-week DNP project timeframe?

Search Methods

A database search on Jay Sexter Library was conducted utilizing the following databases: PubMed, ProQuest, SAGE, Wiley Online Library, Ovid, and CINAHL. Restrictions included the search term “nurse well-being index scores”, published within three years, content type of journal article, magazine article, or publication, limited to items with full text online, peer reviewed publications, and excluded newspaper articles and book reviews. The results yielded 276 resources. By adding the additional search terms of “hospital” and “program”, the search was refined to 185 results. By adding “intervention”, the results were decreased to 157 and by adding “covid” results were decreased to 13 but were not deemed substantial for this project. “Covid” was then removed and the search term “nurse burnout” was added, which resulted in 49 resources. After further evaluation, 18 articles were selected for the literature review.

The project site did not have policies or protocols relating to this subject. After the eighteen resources were critically appraised, a synthesis of pertinent literature was developed, and relevant themes emerged. The types of studies reviewed in the literature include observational mixed research pilot study, 3-round Delphi study, descriptive cross-sectional study, randomized

control trials, meta-analysis of randomized controlled trials, observational studies, and systematic review of peer-reviewed research studies.

Evaluation and Synthesis of Literature

The Relationship between Nurse Burnout, Resiliency, and Well-Being

In the *2020-2021 State of Well-Being Report*, nurses reported that within the last month, 65% felt burned out, 70% had emotional problems such as feeling anxious, depressed, or irritable, and 26% stated that they do not have good work-life balance (WBI, 2020a). In a Delphi study run by the Association for Leadership Science in Nursing (ALSN) and the American Organization for Nursing Leadership Foundation (AONL-F), a team of researchers identified six priority areas, with nurses' well-being, resilience, and safety in the workplace as the top priority (Chipps et al., 2021). Meaningful improvement in acute care nurses' well-being requires organizational dedication through successful support and implementation of a nursing-focused well-being program. High rates of turnover and absenteeism can be costly for healthcare organizations and research has repeatedly shown that burnout among nurses leads to high rates of turnover, decreased quality of care, and overall dissatisfaction (Falatah, 2021; Green and Kinchen, 2021). Increased physical or mental health problems among healthcare workers can endanger the quality of care and contribute to the shortage of frontline staff (Falatah, 2021; Hesselink et al., 2021).

Nurse Burnout

The Joint Commission (TJC) has issued multiple statements regarding the importance of mental well-being and combating nurse burnout. In 2019, *Quick Safety Issue 50* focused on developing resilience to combat nurse burnout (The Joint Commission [TJC], 2019). Magtibay et al. (2017), as referenced by TJC (2019), stated that burnout negatively affects the physical and

emotional health of staff and contributes to rising costs, has a negative impact on patient satisfaction, worsens patient outcomes due to increased rate of safety events, and can increase patient mortality. TJC *Quick Safety Issue 54* focused on promoting the psychosocial well-being of healthcare staff during crisis (TJC, 2020). TJC (2020) declared that to respond to the psychological toll a crisis such as the COVID-19 pandemic puts on staff, the healthcare organization must have a structure in place that supports resilience. Therefore, developing strategic initiatives to improve resiliency, burnout, and well-being can be considered an imperative strategy for protecting patient safety.

Dyrbe et al. (2019) sent an anonymous, cross-sectional exploratory survey to United States nurses in 2016 and followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines for methodology. Burnout was measured using the Maslach Burnout Inventory (MBI) survey and overall, 35% had symptoms of burnout, 30% had symptoms of depression and 43% had poor work performance in the last month (Dyrbe et al., 2019). Nurses who reported burnout were more likely to be absent at work at least one shift per month and have poor work performance (Dyrbe et al., 2019). These statistics are important to note that nurses reported high levels of burnout even pre-COVID-19 pandemic (Dyrbe et al., 2019).

Resilience

Arrogante and Aparicio-Zaldivar (2017) conducted a cross-sectional study on 52 critical care professionals and discovered that resilience minimizes the impact of negative outcomes of workplace stress and prevents burnout. Resilience also mediates the relationship between emotional exhaustion, depersonalization, and reduced personal accomplishment, which if left unaddressed, can lead to negative patient outcomes and quality of care given (Arrogante &

Aparicio-Zaldivar, 2017). Perceived personal accomplishment also leads to protection from emotional exhaustion (Rushton et al., 2015; Wei, et al., 2020).

The cross-sectional survey conducted in 2015 by Rushton et al. on burnout and resilience among nurses practicing in high-intensity settings has been referenced by over 281 researchers as of date. Negative psychological behaviors such as depersonalization and reduced personal accomplishment is a collection of symptoms typically referred to as burnout and can often be witnessed in high stress areas such as the nursing profession (Arrogante & Aparicio-Zaldivar, 2017; Rushton et al., 2015). Rushton et al. (2015) found that the association between burnout and resilience was strong, and that greater resilience protected nurses from emotional exhaustion and was associated with personal accomplishment. In addition, higher levels of resilience were associated with increased hope and reduced stress (Rushton et al., 2015).

Stallings et al. (2021) conducted a descriptive cross-sectional study to identify the degree to which clinicians use their own coping strategies of resilience and its impact on well-being in acute care nurses. An important aspect of this study is that the researchers made note of the limited number of studies existing on resiliency and the effects it has on nurses' health when conducting their literature review (Stallings et al., 2021). Convenience sampling was used to survey practicing nurses using the Connor-Davidson Resilience Scale (CD-RISC) and results suggested that a higher level of resilience correlated with better self-perceived physical and mental health (Stallings et al., 2021).

Impact of the COVID-19 Pandemic on Nurses

In the largest meta-analysis study to date, Batra et al. (2020) analyzed 65 studies (totaling 79, 437 participants) between the dates of December 1, 2019, to July 27, 2020, that reviewed the

psychological impact of COVID-19 among healthcare workers and determined the prevalence of anxiety to be 34%, depression 31%, stress 40%, post-traumatic stress 11%, insomnia 27%, psychological distress 46%, and burnout 37%. Cross-sectional, quantitative, and observational studies were included in the review (Batra et al., 2020). This analysis emphasizes the need for developing an intervention to improve resilience and foster post-traumatic growth among healthcare workers.

Hesselink et al. (2021) performed a cross-sectional survey from June 18, 2020, to July 24, 2020, at four different emergency room departments in the Netherlands. Both quantitative and qualitative data were collected and reported utilizing the STROBE guidelines and well-being was assessed using the World Health Organization Well-Being Index (WHO-5) (Hesselink et al., 2021). Researchers found that all respondents had a difference in the mean WHO-5 index scores before, during, and after the first COVID-19 wave and that the WHO-5 score was significantly higher for physicians compared to the rest of the respondents (nurses, administrative staff, nursing assistants in the emergency room) (Hesselink et al., 2021). Lower levels of well-being and higher levels of perceived stress symptoms amongst nurses may be explained by nurses having closer and prolonged contact with patients than physicians or other healthcare workers (Alsulimani et al., 2021; Batra et al., 2020; Falatah, 2021; Hesselink et al., 2021). Additional findings included scores for self-perceived stress symptoms, emotional stress symptoms, and physical stress symptoms almost doubled (Hesselink et al., 2021). Although this study was specific to the emergency department, the findings can be included when creating a system-wide approach to improve nurse well-being.

In their anonymous cross-sectional study conducted in June 2020, Meese et al. (2021) found that factors associated with higher distress caused by the COVID-19 pandemic include

increased job demands, heavy workload, longer hours, higher frequency of moral distress, and social isolation. Factors associated with lower distress were perceived organizational support, perceived fairness of salary, and resilience (Meese et al., 2021).

The demand on nurses is higher than before due to the COVID-19 pandemic, which creates additional workplace stressors and ethical problems that further intensify nurse burnout (Croke, 2020; Falatah, 2021). Frontline workers are working tirelessly to meet the healthcare demands caused by the COVID-19 pandemic, causing them to be constantly exposed to higher levels of psychiatric morbidities (Batra et al., 2020; Falatah, 2021; Hesselink et al., 2021). Hesselink et al. (2021) found that 19% of emergency room nurses reported increased work pressure as a major stressor, resulting from the high demands of COVID-19 patient care. As the COVID-19 pandemic progresses, it is likely that these psychiatric issues will translate into post-traumatic stress disorder (PTSD), therefore it is critical to develop early interventions to improve psychological well-being (Batra et al., 2020).

Munn et al. (2021) conducted a cross-sectional survey to examine well-being and resilience among health care workers during the COVID-19 pandemic. They found several factors that placed nurses at risk for poor well-being, including having lower levels of resilience, using support resources, lack of organizational support for emotional needs, increased workload, insufficient PPE, inadequate staffing, and lower degree of psychological safety (Munn et al., 2021). The use of support resources is thought to be correlated with the fact that healthcare workers with the lowest well-being may be seeking help and utilizing the support resources provided (Munn et al., 2021).

Luo et al. (2020) conducted a systematic review and meta-analysis on the psychological and mental impact of COVID-19 among healthcare workers, the general population, and patients

with high risk for COVID-19. The review included 62 studies with 162, 639 participants across 17 countries that were published between November 1, 2019, to May 25, 2020 (Luo et al., 2020).

Luo et al. (2020) determined the pooled prevalence of anxiety was 33%, depression was 28%, and that there were no differences among healthcare professionals and the public. However, nurses, especially female nurses, were at the highest risk for developing anxiety and depression (Lara Guedes, 2021; Luo et al., 2020).

Measuring Well-Being

The Well-Being Index (WBI) tool is used by more than 800 organizations to measure distress and well-being and has surpassed more than 250,000 assessments (WBI, 2020a). Many different healthcare organizations use the WBI including hospitals, clinics, medical schools, health systems, and professional associations (WBI, 2020a). Dyrbe et al. (2018b) conducted a national cohort study of nurses and determined that the WBI is a useful screening tool for nurses to stratify both distress and well-being and can be used to identify nurses whose severity of distress may negatively affect patient care and generate staff turnover. The WBI tool is one of only two tools that have national comparative data (Dyrbe, 2018a; WBI, 2020a). In fact, according to the *2020-2021 State of Well-Being Report*, nurses ranked as the highest occupation reporting high levels of distress at 58%, compared to 47% in 2019 (also the highest occupation) (WBI, 2020a). The WBI tool and associated measures are located in Appendix D through Appendix G.

Meese et al. (2021) conducted an anonymous cross-sectional survey at one large healthcare system in the United States. They measured the overall distress of healthcare workers using the 9-item Well-Being Index (WBI) to assess for work-related factors, moral distress (using U.S. Department of Veterans Affairs employee scale), resilience (using the CD-RISC scale), and

system-level support (3-question adaptation from the 8-item Perceived Organizational Support Scale) (Meese et al., 2021). The researchers found that 82% of employees reported high distress (WBI>2) with nurses reporting the highest scores (Meese et al., 2021). This study was significant because the organization had pre-COVID-19 pandemic WBI scores that the researchers were able to compare with current COVID-19 pandemic WBI scores, which showed a substantial increase in WBI distress scores (Meese et al. 2021).

Interventions to Improve Nurse Well-Being, Resilience, and Burnout

Leadership

To enhance professional well-being, Stallings et al. (2021) suggests that nurse leaders focus on developing interventions to increase resilience and explore factors that lead to a negative work environment. TJC (2019) suggested the following interventions to help nurses develop resilience and combat burnout: identify behaviors caused by burnout and compassion fatigue, become aware of stressors/triggers, take part in self-care activities, hold regular staff meetings, and recognize nurses in a meaningful way. Many of these recommendations were based on suggestions from Kester and Wei's (2018) systematic review of peer-reviewed research studies focusing on promoting nurse resilience (TJC, 2019). Low-cost options such as leadership rounding can also have a significant impact on reducing work stressors (Croke, 2020; Meese et al., 2021; Wei et al., 2020).

Additional strategies that leaders can implement to support staff include communicate regularly, reduce extraneous workloads, share positive feedback, and stay flexible with staffing when possible (Falatah, 2021; Heselink et al., 2021; TJC, 2020). Leaders can create positive work environments and resilient team members by understanding, role-modeling, and supporting

resilient behaviors (Croke, 2020; Hesselink et al., 2021; Munn et al., 2021). Leaders should model behaviors that promote self-monitoring of one's well-being, encourage sharing of concerns openly and safely, orient staff to psychosocial resources, proactively monitor staff and deploy employee assistance teams if necessary, and encourage peer support by creating a buddy system (Heselink et al., 2021; TJC, 2020). Wei et al. (2020) conducted a systemic review on literature published between 2010-2019 and deemed that nurse leadership styles have a significant role in helping to reduce nurse burnout. Wei et al. (2020) declared that influential leaders can alleviate nurse burnout by empowering and promoting nurse engagement, applying transformational and authentic leadership, and creating a healthy work environment.

Organizational Support

Stallings et al. (2021) identified three factors that were significantly associated with low resiliency and self-perceived mental health: missing work shifts, thoughts of quitting, and heavy workload. All three of these factors can be associated with a negative work system, often a result of a complex healthcare organization. Rushton et al. (2015) declared that by enhancing nurse resilience and supporting the creation of a healthy work environment, organizations can improve retention and decrease turnover. Increasing resilience correlates with positive patient outcomes and high quality of care given (Arrogante & Aparicio-Zaldivar, 2017). Positive well-being can help contribute to a positive practice environment.

Alsulimani et al. (2021) conducted a cross-sectional study involving descriptive and analytic surveys from June–August 2020 on 646 healthcare workers in Saudi Arabia and found the prevalence of burnout to be 75%. Alsulimani et al. (2021) determined that immediate interventions to promote the psychological well-being of healthcare workers was crucial to sustain

the workforce. Suggested interventions include communicating clearly, shorter shifts, having more rest periods, and detailed instructions for PPE (Alsulimani et al., 2021).

Batra et al. (2020), Meese et al. (2021), and Munn et al. (2021) found that perceived organizational support was associated with lower distress. Factors contributing to organizational support include shared decision-making opportunities, leadership styles, effective communication, and employee recognition efforts (Falatah, 2021; Meese et al., 2021; Sinskey et al., 2020; Wei et al., 2020). In contrast to some of the other articles included in the literature review, Meese et al. (2021) suggests that efforts to improve the work environment may have more of a positive impact on reducing distress than the efforts to increase individual resilience. Batra et al. (2020) and Lara Guedes et al. (2021) suggested the need for educational and policy interventions focusing on social support, positive thinking, and self-care as future necessities. Additional strategies include mindfulness-based interventions (MBIs), organizational support, work-based interventions such as limiting amount of overtime worked, having a buddy support system, open dialogue among frontline workers and administration, innovative counseling platforms such as tele-counseling, and increasing the use of employee assistance programs (Batra et al., 2020).

Self-Care

TJC (2020) recommends the following strategies for healthcare workers to support well-being, manage stress, and strengthen resilience: practice self-care and engage in healthy coping strategies, take microbreaks from patient care for respite, practice sleep hygiene by sleeping at least seven hours per night, partner with a colleague as a built-in support system, stay connected with friends and family, self-monitor for symptoms of depression or stress and seek help when needed, and include debriefing sessions in each department to help foster resilience (Croke, 2020; Lara Guedes et al., 2021). Additional interventions that Kester and Wei (2018), Lara Guedes et al.

(2021), and Rushton et al. (2015) identified for improving nurse resiliency and combating nurse burnout include learning self-care techniques for sleep, fitness, healthy eating habits, and building strong relationships with positive role models in the workplace.

Lara Guedes et al. (2021) conducted a cross-sectional study with a sample of 821 Portuguese nurses to assess for stress, anxiety, and depression reduction strategies during the COVID-19 outbreak. Lara Guedes et al. (2021) found that healthy eating, physical activity, rest between shifts, having social support, verbalizing feelings, and spending less time reading news outlets were associated with improved mental health. Incorporating these self-care interventions into a comprehensive well-being program will be an essential element for improving the emotional health of nurses.

Stress Management, Meditation, and Mindfulness Training

A national survey of nurses, conducted by Kemper and Khirallah in 2015, listed convenience as the most important factor when choosing stress management training. Magtibay et al. (2017) conducted a quasi-experimental study designed to test the efficacy of Stress Management and Resiliency Training (SMART) on fifty nurses working at a Mayo Clinic in Rochester, Minnesota. Participants were offered various options for learning content defined as blended learning and included web-based format, independent reading, open discussions, or a combination (Magtibay et al., 2017). The study showed improvements in stress, anxiety, resilience, mindfulness, happiness, and burnout among nurses as early as week eight and suggests that the flexibility of blended learning is a great option for nurses (Magtibay et al., 2017). Furthermore, healthcare organizations that implement burnout interventions, such as mindfulness and resilience training, may experience decreased turnover and increased patient satisfaction at the organizational level (Magtibay, 2017). Magtibay et al. (2017) stressed the importance of

blending learning opportunities to include online and in-person options to make mindfulness training both convenient and easily accessible. When developing well-being program objectives, it will be important to include blended learning options.

Su-Eun et al. (2021) conducted a systematic review to evaluate if mind-body modalities improve burnout in nurses, specific to improving mental health. The review of seventeen studies included 15 randomized controlled trials (RCTs) and 2 two cross-over RCTs (Su-Eun et al., 2021). Mind-body modalities, also known as mindfulness-based interventions (MBI) include tai chi, music, relaxation, yoga, and meditation and have been used in several populations to improve stress (Su-Eun et al., 2021). Su-Eun et al. (2021) hypothesized that MBIs have the potential to improve nurses' level of well-being and mental health and/or reduce levels of burnout by relieving physical symptoms of burnout and improving the psychological stress of nurses. This review found that there was no evidence that multimodal resilience programs, including mindfulness-based stress reduction (MBSR) and MBIs statistically improved mental health (Su-Eun et al., 2021). However, Su-Eun et al. (2021) stated that the methodological quality of the studies reviewed were not optimal and that the certainty of findings were not high, suggesting that their findings could change based on future high-quality and larger-scale studies. Although the relation of MBIs to improving mental health of nurses was not proven, mind-body modalities are still promising for physical symptoms of burnout such as anxiety, depression, headaches, insomnia, and perceived stress (Su-Eun et.al, 2021).

Delaney (2018) conducted an eight-week observational mixed research pilot study, following STROBE guidelines, to examine the effect of a mindful self-compassion (MSC) training intervention on nurses' compassion fatigue and resilience. One limitation of the pilot study was a small sample size of only female nurses (n=13) (Delaney, 2018). Delaney (2018)

hypothesized that MSC is more preventative than reactive and should prove to be more cost effective than one-on-one therapy for nurses. The intervention taught core principles and practices nurses can use to respond to difficult moments with kindness, care, and understanding (Delaney, 2018). The focus was for participants to develop self-compassion and mindfulness and the weekly two-and-a-half hour long classes were taught by a trained MSC instructor (Delaney, 2018). This study provided preliminary empirical evidence on the benefit of self-compassion interventions on nurses' compassion fatigue and resilience (Delaney, 2018). While the DNP project will only last four weeks, the activity of incorporating MSC into a well-being program is applicable.

National Resources for Improving Nurse Well-Being

National resources play an important role in aiding organizations to support nurses. Examples of national resources that focus on improving nurse well-being include ANA's *Well-Being Initiative*, Gratitude Practice for Nurses (a joint effort of the American Nurse Foundation and the Greater Good Science Center at the University of California), IHI's *PPE*, and ANA's *Healthy Nurse Healthy Nation*. This DNP project will focus on incorporating evidence-based interventions from IHI's *PPE*, ANA's *Healthy Nurse Healthy Nation*, and ANA's *Well-Being Initiative* into a well-being program for acute care nurses.

The IHI's *PPE* marketing campaign focuses on graphics that advertise actions that provide psychological protection by promoting mental health and well-being (IHI, 2020). Activities are specific to both individuals and team leaders and can be easily showcased throughout the organization free of charge (IHI, 2020) (see Appendix A).

ANA's *Healthy Nurse Healthy Nation* (HNHN) campaign is a free wellness program for nurses that focuses on five domains: physical activity, rest, nutrition, quality of life (QOL), and

safety (HNHN, 2022). HNHN was launched in 2017 and uses an online platform and social media to conduct challenges, health surveys, discussion boards, contests, blogs, and provides free resources for nurses (HNHN, 2022) (Appendix B).

ANA's *Well-Being Initiative* provides a guide for mental health and resiliency resources to nurses and includes resources from multiple platforms (ANA, n.d.). The ANA's *Well-Being Initiative* lists common symptoms of excessive stress (physical symptoms, sleep disturbances, emotional responses, difficulty thinking clearly, risky behaviors, and social impacts) and emphasizes that support will be different for each person (ANA, n.d.). Free resources included in the ANA *Well-Being Initiative* include apps (Moodfit and Happy app), podcasts (A Nursing State of Mind), links to HNHN activities, webinars, free and discounted therapy companies, potential financial assistance, toll-free numbers to speak to someone personally, expressive writing, self-assessments for stress, and downloadable resources such as the after-work checklist (ANA, n.d) (Appendix C). Each of these resources will be valuable to include in the DNP project.

Summary

A comprehensive review of available literature on nurse well-being was completed. Although many studies have proven the value of addressing the needs of burnout and well-being in the general population or with physicians, fewer studies addressed clinically effective interventions or strategies in relation to acute care nurses during a pandemic. Burnout can negatively impact patient care and have harmful effects on nurses' physical and mental well-being. Well-being interventions such as education on resilience and coping skills, wellness activities, and open conversations about mental health are essential in fostering post-traumatic growth in frontline workers (Batra et al., 2020). The long-term effects of the COVID-19 pandemic on nurses will not be known for many years, but the significance of evidence and the need for

improving well-being is crucial for sustaining a healthy, diverse, and resilient future nursing workforce. To combat nurse burnout and prevent turnover, the evidence shows that healthcare leaders must take initiative to improve nurse well-being now.

Project Aims

The aim of this scholarly project is to educate healthcare professionals on how to identify burnout and provide organizational opportunities for improving well-being and resilience in acute care nurses. Nurses are naturally at more risk for burnout due to their caring nature. Resilient organizations are better positioned to achieve organizational objectives and withstand turbulent times during periods of crisis (Sinsky et al., 2020). Increasing individual well-being practices and resiliency of nurses creates a healthier work environment, which improves organizational culture and staff satisfaction, resulting in a higher retention rate of nursing staff (Rushton et al., 2015). By utilizing evidence-based structures and engraining such practices within strategic initiatives, organizations create a culture where well-being is both essential and a priority (Sinsky et al., 2020).

Project Objectives

In the timeframe of this DNP project, the host site will:

1. Administer an education program focusing on organizational opportunities for improvement in feelings of burnout and poor well-being as evidenced by an overall decrease in NWBI scores of acute care nurse's post-implementation of well-being project.
2. Implement an evidenced-based wellness activity program that incorporates activities of the American Nurse Association's (ANA's) *Healthy Nurse Healthy Nation* and ANA's *Well-Being* initiative and the IHI's *PPE* program to 100% of the acute care nursing departments

within the organization through printed materials, staff meetings, *Wellness Wednesday* activities, and social media platforms.

3. Improve rates of engagement in *Wellness Wednesday* activities from acute care nurses as evidenced by increasing participation each week.

Framework and Application to DNP Project

Theoretical Framework

Utilizing both a conceptual and theoretical framework helps DNP students recognize health patterns that could lead to a negative impact on a population. Frameworks also provide the process to develop interventions that promote health and wellness and the structure to evaluate the effectiveness of such outcomes (Moran et al., 2020, p. 105-106). Because nursing is a discipline based on caring, the underlying nursing theory for this project is the *Theory of Human Caring* (Watson, 2022). Watson's *Theory of Human Caring* is "one prominent theoretical, ethical, and philosophical framework in which nurses and administrators are engaged to inspire and transform nursing" (Watson, 2009, p. 469). The ability to practice self-care, care of coworkers, and care of patients allows nurses to use *Watson's Theory of Human Caring* (Moran et al., 2020, p. 286). Nurses contribute to the healing process through the concept of caring-healing in which nursing care is performed both unconsciously and physically (Watson, 2002). Furthermore, the concept of caring and kindness is what distinguishes basic care from meaningful nursing care that is empathetic and compassionate (Norman et al., 2016).

Historical Development of the Theory

The *Theory of Human Caring* was originally developed by Jean Watson between 1975 and 1979 and has since evolved into the concept of Caring Science (Watson, 2022). Watson's *Theory*

of Human Caring can be used interchangeably with *Unitary Caring Science* and *Transpersonal Caring Science Theory* (Wagner et al., 2010). Watson also established a framework entitled “carative factors” that helps to guide nursing values and the practice of human caring, called *10 Caritas Processes* (Appendix H) (Watson, 2022). These carative factors focus on subjective personal experiences and are meant to be separated from the traditional curative medicine (Watson, 2022). The *Theory of Human Caring* is unique in that this nursing theory can be applied to both the nurse-patient relationship, but also to the nurse an individual.

Major Tenets of Theory. Watson’s model is made of seven assumptions: caring can only be demonstrated and practiced interpersonally, caring consists of carative factors that satisfy basic psychological human needs, caring promotes health, caring responses demonstrate acceptance, a caring environment helps develop one’s potential, the science of caring complements the science of curing, and the practice of caring is essential to nursing (Petiprin, 2020). One of the core principles of Watson’s *Theory of Human Caring* is the practice of love, kindness, and equanimity within themselves to be able to deliver a caring-healing environment (Wagner et al., 2010). An important aspect of developing a well-being program for nurses will be to include these tenets of theory. Nurses must learn to practice self-care and have compassion for self and others to be a healthy caregiver (Gray-Miceli, 2021). Watson states that nurses must have authentic presence to provide holistic care that includes the mind, body, and spirit (Wagner et al., 2010).

Additional core concepts of Watson’s *Theory of Human Caring* are transpersonal caring relationships, a relational caring for self and others, and the belief that caring changes self, others, and the culture of those around you (Wagner et al., 2010). Transpersonal caring science focuses on the ideology of intentionality. Watson defines intentionality as an awareness of doing for another or being with another that is directed with purpose (Wagner et al., 2010; Watson, 2002).

Intentionality is also described by Watson as how one ‘consciously cares’ for self as a person or as a nurse for another person (Wagner et al., 2010). To develop caring relationships, nurses must intentionally learn to practice mindfulness as a carrative factor that promotes personal growth and practice (Gray-Miceli, 2021).

Conceptual Framework

Conceptual frameworks help meet quality improvement objectives by identifying and categorizing the necessary components for successful implementation (Moran et al., 2020, p. 137). Utilizing a quality improvement method helps DNP projects focus on process refinements and improved outcomes (Moran et al., 2020, p. 161). The Plan-Do-Study-Act (PDSA) is one of the most frequently used tools in healthcare and allows for rapid-cycle improvements (Christoff, 2018). The PDSA model was chosen as it permits for continuous adjustment of the intervention (Appendix I). An additional benefit of the PDSA model is that while it is simplistic, it still thoroughly assesses the problem, provides steps for implementation, and evaluates the outcomes (Reed & Card, 2016).

The PDSA model begins by asking three questions (Appendix J) (Christoff, 2018). For this scholarly project, the question of “what are we trying to accomplish” is answered by an improvement in nurse well-being (Appendix J) (Christoff, 2018). The second question of “how will we know that a change is an improvement” will be evidenced by an improvement in nurse well-being index scores post-implementation of project (Appendix J) (Christoff, 2018). The last question to be answered is “what change can we make that will result in improvement?” (Appendix J) (Christoff, 2018). The main intervention this DNP project consists of is educational opportunities and increased awareness on the importance of nurse well-being. Once these three questions have been answered, the four step PDSA model can begin.

The *planning* stage consists of developing a plan with specific tasks and identifying who, what, when and where the plan will take place (Christoff, 2018). For this DNP project, the *plan* consists of creating a well-being survey that includes NWBI questions to be administered to acute care nursing departments pre and post DNP project timeframe, examining the current gap in wellness activities, and identifying potential solutions such as a weekly educational program titled *Wellness Wednesday* that includes the importance of well-being and incorporates activities of the ANA's *Healthy Nurse Healthy Nation* and *Well-Being Initiative* and the IHI's *PPE* program. The *do* stage is where the plan is carried out and requires comprehensive documentation of the implementation process for analysis to be conducted in phase three (Christoff, 2018). For this DNP project, the *do* phase will consist of incorporating evidence-based wellness activities into a weekly *Wellness Wednesday* intervention that provides resources for staff focusing on identifying burnout and seeking help through both written materials on nursing units and social media platforms.

The third stage, *study*, involves the act of evaluating documented data to assess if the intervention is working and comparing the results with expected outcomes (Christoff, 2018). The *study* phase for this DNP project will include assessing pre and post project survey results that includes the data from both internal demographic items and questions from the NWBI tool to ascertain effectiveness of the well-being program. The last stage, *act*, is where the intervention being tested is either adopted, changed, or stopped based on the data from the *study* phase (Christoff, 2018). This last step is where the model is designed as a cycle and if necessary, allows for additional changes, based on results of previous steps. For this DNP project, future plans to either standardize the project or create additional improvements will be determined. PDSA

methodology is proven to help build fundamental knowledge and lead to significant healthcare improvements (Christoff, 2018).

Setting

The project setting is in North Texas. The organization started with the opening of a community hospital in 1973, enhancing community health care delivery and addressing the future health care requirements of a growing community. The hospital's service offerings now include emergency department (ED), inpatient, surgical, outpatient, ambulatory surgical centers, and clinic settings. The East campus at the project setting is the main campus facility. It includes a five-story complex with a total of 99 acute medical and surgical beds, 10 operating rooms and over 176,000 square feet located on over 40 acres. In November of 2006, the West campus at the project setting opened to provide an additional 49 beds for inpatient rehabilitation, behavioral health, wound care, and hosts several business offices.

The project setting is accredited by the following entities: The Joint Commission (TJC) Hospital and Lab Accreditation, 5-Star Dialysis Center, Advanced Certification as a Primary Stroke Center, American College of Cardiology (ACC) Public Reporting, Center of Excellence for Bariatric Surgery, the Commission on Cancer Accredited Program, Center for Medicare and Medicaid (CMS), and Occupational Safety and Health Administration (OSHA). The hospital is governed by an 11-member Board of Directors (BOD) and membership includes leaders and business owners from Wise County. Leadership chain of command at the organization involves department directors and management reporting to the executive staff, who then report to the Chief Executive Officer (CEO), who ultimately reports to the BOD. This project will not utilize an electronic health record for documentation. Instead, participant surveys will be sent via the

Microsoft Forms application that the facility already has access to and uses frequently for staff surveys.

Population of Interest

The DNP project setting will focus on the organization's East campus, and the direct population of interest includes the acute care nursing staff in the ED, labor and delivery (L&D), intensive care unit (ICU), and medical surgical (MS) departments. These departments have a total of 159 registered nurse (RN) and licensed vocational nursing (LVN) staff with the following breakdown: ER (n=24), MS (n=69), ICU (n=48), L&D (n=18). The indirect population of interest will include the patients on these units and non-licensed nursing staff that may also participate in *Wellness Wednesday* activities and be exposed to the well-being information and resources posted in each of the departments. Inclusion criteria will consist of any full-time, part-time, or PRN RN or LVNs working ED, L&D, ICU, or MS either at bedside or non-bedside (serving in a current management role for that department) during the time the project is implemented. Patient care techs/aids that are non-licensed nurses and the staff on nursing units not listed in the above inclusion criteria will be excluded from this project.

Stakeholders

There are many stakeholders that play an integral part in this DNP project. The key stakeholders are the acute care nurses working in ED, L&D, ICU, and MS as they stand to benefit the most from interventions that improve well-being. However, the entire organization can benefit from the project as improved well-being of staff has been shown to decrease staff turnover and improve the quality of patient care that is provided (Dyrbye, et al, 2018b; McHugh et al., 2011; WBI, 2020a). Organizational stakeholders include the Chief Nursing Officer (CNO), Director of

Corporate Wellness, Center for Emotional Wellness Manager, Nursing Managers of acute care nursing departments, Marketing department staff, and entire administrative team for leadership support of well-being practices. The organization does not require an affiliation agreement with Touro University Nevada (Appendix K) and permission was obtained by the CNO to conduct the DNP project within the specific nursing departments (Appendix L).

Interventions

The project will primarily focus on implementing an evidenced-based well-being program that incorporates different weekly activities and creates engagement opportunities designated as *Wellness Wednesday*. The weekly well-being interventions will consist of a rolling cart through each department with a specific activity and evidence-based educational topic, as well as incorporation of IHI's *Psychological PPE* infographics (Appendix A) and promotion of ANA's *Health Nurse Healthy Nation* (Appendix B) and ANA's *Well-Being Initiative* (Appendix C) throughout each nursing department. Well-being practices will be normalized through frequency of activities and well-communicated to frontline staff through multiple platforms. It is often easier to translate theory into practice when there are opportunities for nurses to have hands-on experiences through education and face-to-face interactions (Norman et al, 2016). To capitalize on this point, the DNP project lead will offer weekly opportunities for staff engagement that include educational activities and resources that focus on identification of burnout, promotion of self-care, and improving well-being.

Three weeks prior to project start date (the beginning of June 2022), the pre-intervention survey (Appendix M) will be created utilizing the Microsoft Forms application (Appendix W) and sent via internal email (Appendix X) to the acute care nurses in the ER, ICU, L&D, and MS departments and posted on the internal social media site (Appendix Y). Objects that must be

purchased prior to intervention include aromatherapy patches, which will be purchased via Amazon using the DNP student's own funds. Additional resources such as healthy snacks, educational flyers, chair yoga exercises, and mindfulness practices will be provided by internal stakeholders at no cost to the participants. Permission was obtained from Academic and Program Mentors to implement the pre-intervention survey early to allow for a two-week timeframe for nurses to complete the questionnaire. During this pre-intervention time, infographics will be created, in conjunction with the Marketing team, utilizing the national resources from IHI and ANA (Appendix A, B & C).

During week 1 (July 6-12, 2022), the DNP student will spend additional hours promoting the well-being project at departmental meetings, Professional Practice Council (PPC), and via social media (internal Nursing Facebook page) (Appendix Y). The DNP project activity will be to roll the wellness cart through each acute care nursing department with a specific intervention on each Wednesday, hence the intervention titled *Wellness Wednesday*. For week one, the *Wellness Wednesday* activity includes providing lavender aromatherapy patches via the rolling cart to each acute care nurse and explain the effectiveness of such intervention in reducing burnout (Emasealu, 2021). An educational flyer that identifies symptoms of burnout will be printed in the internal xerox department, handed to each nurse, and placed in the nursing department breakroom, sent via internal email, and posted on the internal nursing Facebook page at no cost (Appendix N) (NurseRegistry, 2022).

Week two's (July 13-19, 2022) *Wellness Wednesday* activity includes visiting each department with the wellness cart, along with the Employee Assistance Program (EAP) Manager and conducting a quick mindfulness and box breathing activity in the breakroom with the acute care nurses. An educational flyer that includes a checklist to help decompress after work will be

printed in the internal xerox department, handed to each nurse, and placed in the nursing department breakroom, sent via internal email, and posted on the internal nursing Facebook page at no cost (Appendix O) (ANA, n.d.). The mindfulness and box breathing activity will be recorded and posted on Microsoft Stream, posted on social media, and emailed to all nursing leaders (Appendix Z).

Week three's (July 20-26, 2022) *Wellness Wednesday* intervention includes teaching chair yoga, with assistance from the Director of Corporate Wellness to the acute care nurses in each department and providing them with an educational flyer. An educational flyer that identifies steps for self-care will be printed in the internal xerox department, handed to each nurse, and placed in the nursing department breakroom, sent via internal email, and posted on the internal nursing Facebook page at no cost (Appendix P) (NurseRegistry, 2022).

Week four's (July 27-August 2, 2022) *Wellness Wednesday* activity is providing healthy snacks to the nurses in the acute care departments and providing education on the organization's Employee Assistance Program (EAP), WiseCares, and additional internal resources to support well-being. An educational flyer that lists all the internal resources will be printed in the internal xerox department, handed to each nurse, and placed in the nursing department breakroom, sent via internal email, and posted on the internal nursing Facebook page at no cost (Appendix Q).

Week five (August 3-9, 2022) will consist of sending the post-intervention survey created on Microsoft Forms via internal email to the nurses in ER, ICU, L&D, and MS (Appendix M). Week 6 (August 10-16, 2022) will include analyzing the data from the post-intervention survey, evaluation of the project, and discussing such findings with the WHS administrative team. Discussion will also include future goals for well-being initiatives that can be incorporated into WHS's strategic plan. The project's complete timeline is in Appendix R.

Tools

The WBI scale is an established tool and will be utilized to measure the effectiveness of the interventions in this quality improvement project. The WBI can be purchased for a more robust platform or can be used for free as a measurement tool (WBI, 2020a). For the purposes of this DNP project, the free WBI tool will be utilized. The WBI tool is available for academic research and does not require permission to use (WBI, 2021). The required terms and conditions of the Material Transfer Agreement were accepted by the DNP student (Appendix S) (WBI, 2021).

The WBI is an interactive 9-item self-assessment tool, invented by the Mayo Clinic, that measures six dimensions of distress and well-being among healthcare workers worldwide and has received a vigorous multi-step validation (Appendix D) (WBI, 2020b). The WBI tool asks participants to answer nine questions based on how they have felt within the past 30 days (Appendix D) (WBI, 2020b). The six dimensions of distress and well-being that are assessed include: likelihood of burnout, severe fatigue, suicidal ideation, quality of life, meaning in work, and work-life integration (WBI, 2020b). Interpretation of results (Appendix E), predictive validity (Appendix F), and area under the curve (Appendix G) for the WBI tool have been previously validated and are published in the *WBI Research Document* (WBI, 2020b). For the purposes of this project, the NWBI tool will be incorporated into a survey that also includes demographic, background, NWBI, and post-intervention participation questions, which will be sent to acute care nurses pre and post intervention for comparison (Appendix M).

Study of Interventions and Data Collection

Electronic surveys are a cost-effective and efficient approach to data collection (Cope, 2014). The DNP student obtained authorization from the project mentor to distribute the pre-

implementation survey three weeks prior to the start of the DNP project (Appendix W). Both the pre-implementation and post-implementation survey link will be distributed via email and social media, which allows for immediate study participation (Appendix X and Appendix Y). The survey link will also be converted to a QR code and printed on a laminated flyer (Appendix V). The flyer will be placed in each acute care nursing department's breakroom for convenient access to the survey. Each survey link will remain open for two weeks and a reminder for the two surveys will be sent weekly via email and social media.

Data collection for this project will be anonymous. Both the pre-implementation and post-implementation surveys will be completed utilizing the Microsoft Forms application, which has the option to select that all data can be anonymous and encrypted (Appendix W). Microsoft Forms gives the option to automatically export data to Microsoft Excel. A codebook was generated for the DNP project and will help to further protect participants' privacy (Appendix T). The anonymity of the survey responses will assist to mitigate any risk to the participant. Study results are reported in aggregate only and without identifying information. Data will be stored on a password-protected computer and destroyed immediately after the DNP nurse's graduation.

Ethics and Human Subjects Protection

Data regarding burnout, compassion fatigue, and well-being pertain to the mental and emotional health of the participant and must be kept confidential. Due to the nature of the DNP project seeking to evaluate and improve nurse well-being, there may be an inherent minimal risk for the mental health of the nurses participating. Risks may include feeling uncomfortable or exhibiting signs of emotional distress when pondering the survey questions. The nurses will be provided instructions on how to utilize the practicum site's employee assistance program (EAP) and/or national nursing resources from ANA, if needed, during their participation. Participants

may also choose to stop the survey at any time.

Survey participation was voluntary, and the nurses were not offered any type of payment or incentive for completing. Nurses were recruited through flyers, email, and social media devoted specifically to WHS nurses. Implied consent was indicated by the nurse completing the voluntary survey. There are not any direct benefits from the survey other than the results may help benefit others in the future by placing emphasis on the protection of nurse well-being. Nurses who participate in the *Wellness Wednesday* activities will benefit from the knowledge and exercises surrounding mental health and well-being. Neither the practicum site nor Touro University Nevada require IRB approval for quality improvement projects.

Measures and Plan for Analysis

The results of the data collected from Microsoft Forms will be entered into IBM Statistical Package for the Social Sciences (SPSS) GradPack version 27 software for evaluation (Statistical Package for the Social Sciences [SPSS], n.d.). This quality improvement project will utilize the paired t-test statistical test. The paired t-test is the test of choice for comparing differences in means amongst individuals (Sylvia & Terharr, 2018). Descriptive statistics include the frequency distribution for number of participants, measures of central tendency (mean/median/mode), and measures of variability (range, standard deviation) for NWBI scores (Appendix U). The assumptions include normality of data and homogeneity of variance with the data being collected from random sampling. The threshold score provides the DNP student with a way to estimate the risk of distress in nurses that score above the set level (Appendix E) (WBI, 2020b). Analysis of data collected will be performed by SPSS to determine if the weekly *Wellness Wednesday* activities improve the well-being in acute care nurses by comparing the difference between pre- and post-implementation survey answers (SPSS, n.d.). Having a significant difference in scores

pre- and post-implementation could indicate that the *Wellness Wednesday* activities have a positive impact on improving nurse well-being. The null hypothesis indicates that education does not affect the levels of nurse well-being.

Results

Survey Participant Demographics

Table 1 is a summary of the demographic data for this project. Pre-intervention survey participation (n=28) was higher than post-intervention survey participation (n=19). Departmental participation was similar pre- and post-intervention, other than the ED, who had 50% less participation for post-intervention survey. The DNP project timeline (Appendix R) was modified by extending the post-intervention survey from one week to two weeks due to the lack of survey participation but was consistent with the pre-implementation survey period. The demographics of pre-implementation participants were primarily female (93%), and each age bracket was equally represented (n=6 or n=7), other than age 60 and above (n=2). Most participants had less than 5 years of nursing experience (32%), 46% had their BSN, 96% worked full-time, 93% were RNs, and 79% were dayshift.

Table 1*Demographic Characteristics*

Characteristics	Pre-Intervention (n=28) Participants (%)	Post-Intervention(n=19) Participants (%)
Age		
20-29	6 (21%)	2 (11%)
30-39	7 (25%)	7 (37%)
40-49	7 (25%)	2 (11%)
50-59	6 (21%)	4 (21%)
60+	2 (7%)	4 (21%)
Gender		
Female	26 (93%)	17 (89%)
Male	2 (7%)	2 (11%)
Non-Binary	0 (0%)	0 (0%)
Prefer not to answer	0 (0%)	0 (0%)
Highest Degree Held		
Diploma degree in Nursing	2 (7%)	2 (11%)
Associates degree in Nursing	10 (36%)	8 (42%)
Bachelor's degree in Nursing	13 (46%)	8 (42%)
Master's degree in Nursing	3 (11%)	1 (5%)
Doctor of Nursing degree	0 (0%)	0 (0%)
Years of Experience as a nurse		
0-5 years	9 (32%)	4 (21%)
6-10 years	5 (18%)	5 (26%)
11-15 years	5 (18%)	2 (11%)
16-20 years	2 (7%)	2 (11%)
20 or more years	7 (25%)	6 (32%)
Employment Status		
Full-time (0.51 to 1.0 FTE)	27 (96%)	17 (89%)
Part-time (0.5 or less FTE)	1 (4%)	2 (11%)
Total Survey Participation		
Total Participants	28 (15%)	19 (11%)
ED	6 (22%)	2(11%)
L&D	6 (21%)	5 (26%)
ICU	9 (32%)	7 (37%)
MedSurg	7 (25%)	5 (26%)
Well-Being/Burnout		
I know the symptoms of burnout	Yes 24 (86%), No 4 (14%)	Yes 19 (100%), No 0 (0%)
Do you feel that WHS cares about your well-being?	Yes 14 (50%), No 14 (50%)	Yes 14 (74%), No 5 (26%)
I feel confident in speaking to my leader about mental well-being	Yes 17 (61%), No 11 (39%)	Yes 15 (79%), No 4 (21%)

Assumptions

Statistical assumptions of the paired t-test were addressed by comparing two separate observations (pre-intervention and post-intervention NWBI means), normal distribution occurred between pairs, and there were no extreme outliers (Figure 2 and Figure 3). Participants were not given a unique participant identification number, therefore pre and post scores were not matched. Because of this, estimates of error may be biased since the error was a combination of within-person and between-person variations.

Figure 2

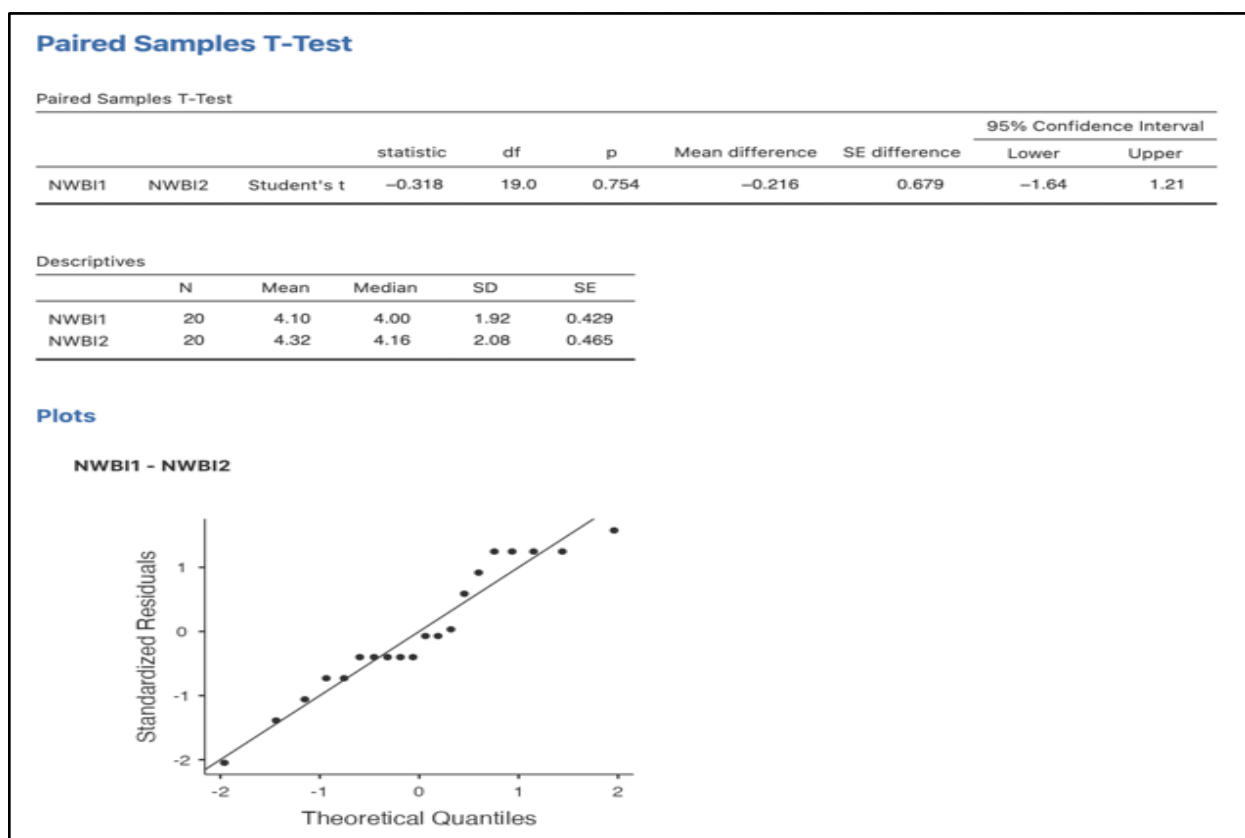
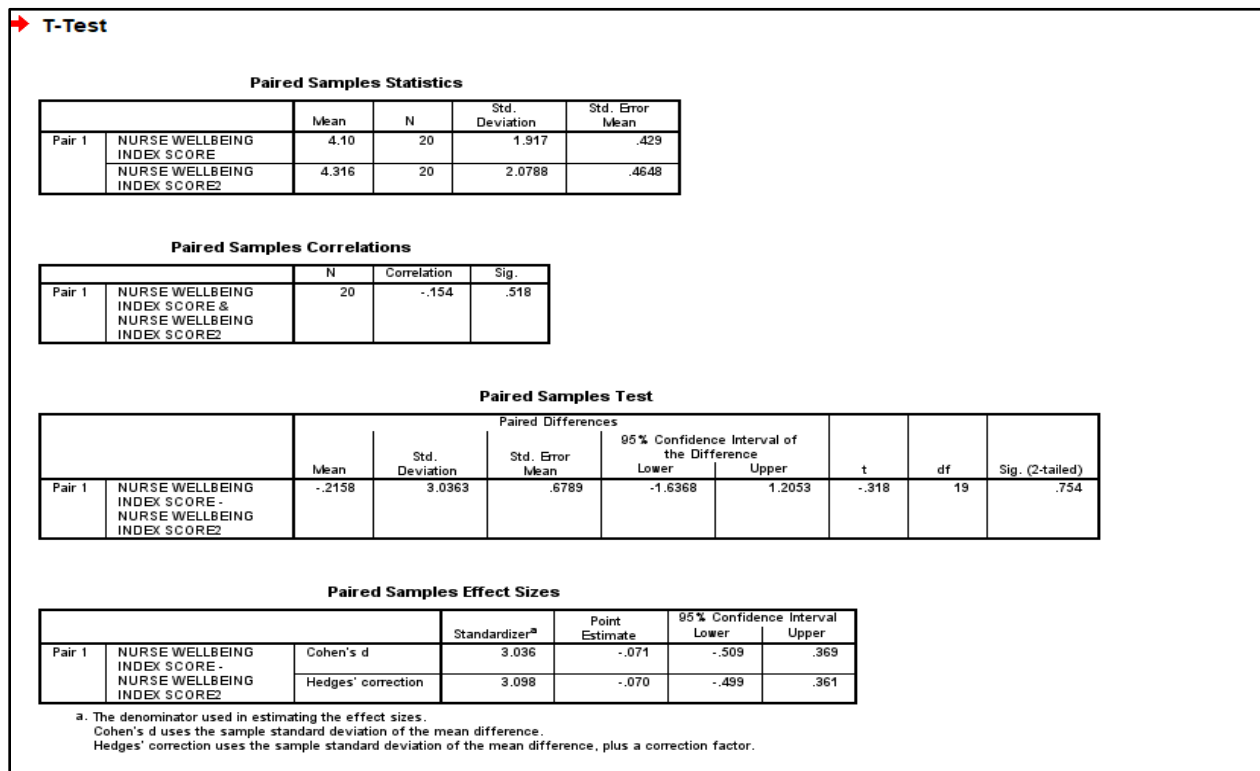


Figure 3



NWBI Scores

The mean pre-intervention NWBI score for all participants was 4.1 (Figure 4) and the mean post-intervention NWBI score was 4.3 (Figure 5). The percentage of participants with high risk scores (NWBI>2) was 82% pre-intervention and 79% post-intervention (Figure 6).

Figure 4

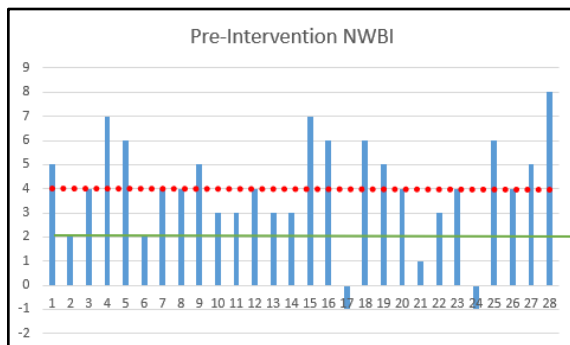


Figure 5

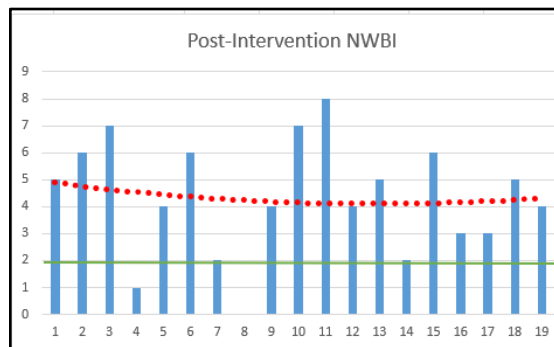
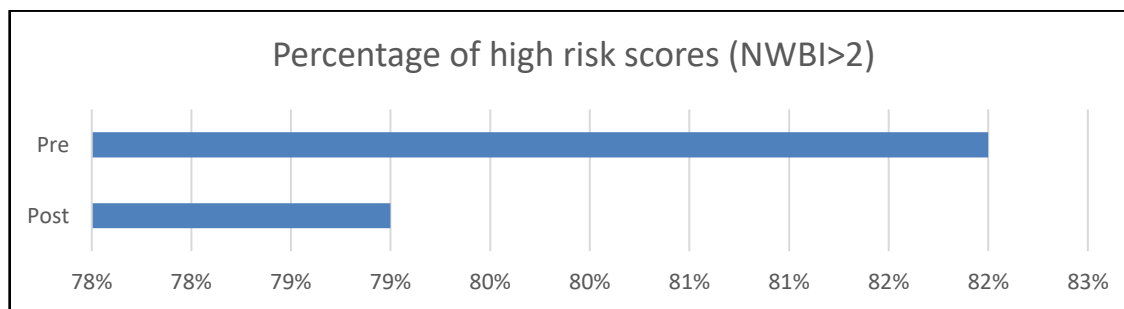


Figure 6

Pre-intervention, 86% of participants knew the symptoms of burnout; post-intervention, 100% knew the symptoms of burnout (Table 1). When asked if they felt burned out at work, 96% of participants answered 'yes' pre-intervention and 100% answered 'yes' post-intervention. When asked if participants felt confident that WHS cares about their well-being, 50% responded with 'yes' pre-intervention and 74% responded 'yes' post-intervention. When asked if participants felt confident speaking to their leader about personal well-being, 61% responded with 'yes' pre-intervention and 79% responded 'yes' post-intervention.

Engagement with Wellness Activities

Only thirty-seven percent (n=7) of participants that answered the post-intervention survey participated in an in-person activity of *Wellness Wednesday* (Figure 7). The in-person *Wellness Wednesday* activities experienced decreasing participation in weeks two and three and higher participation in weeks one and four (Figure 8). Week one's aromatherapy patches had the most engagement with participants actively seeking out the DNP student to obtain the patch (Figure 8). Week three's chair yoga and self-care activity was not well received as evidenced by lack in participation and engagement (Figure 8). Week two's mindfulness activity had both in-person participation and was also watched a total of eight times on YouTube (Figure 8) (Appendix Z). When asked about which learning method they preferred, 78% (n=14) answered that they preferred a combination of in-person *Wellness-Wednesdays*, print materials, and social media

posts (Figure 7). The social media platform was proven to be the most interactive learning method with engagements, people reached, and comments for each week’s post (Figure 9). Week 1, *symptoms of burnout*, received the highest levels of overall engagement (Figure 10).

Figure 7

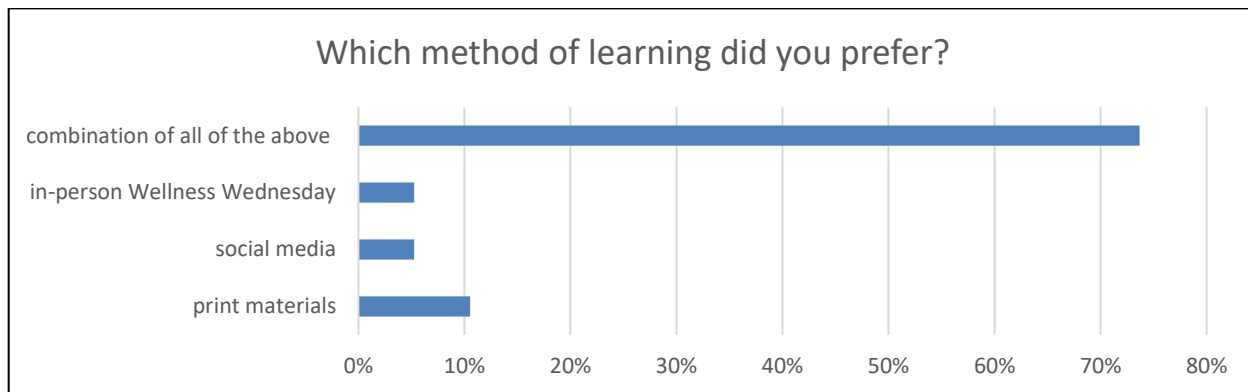


Figure 8

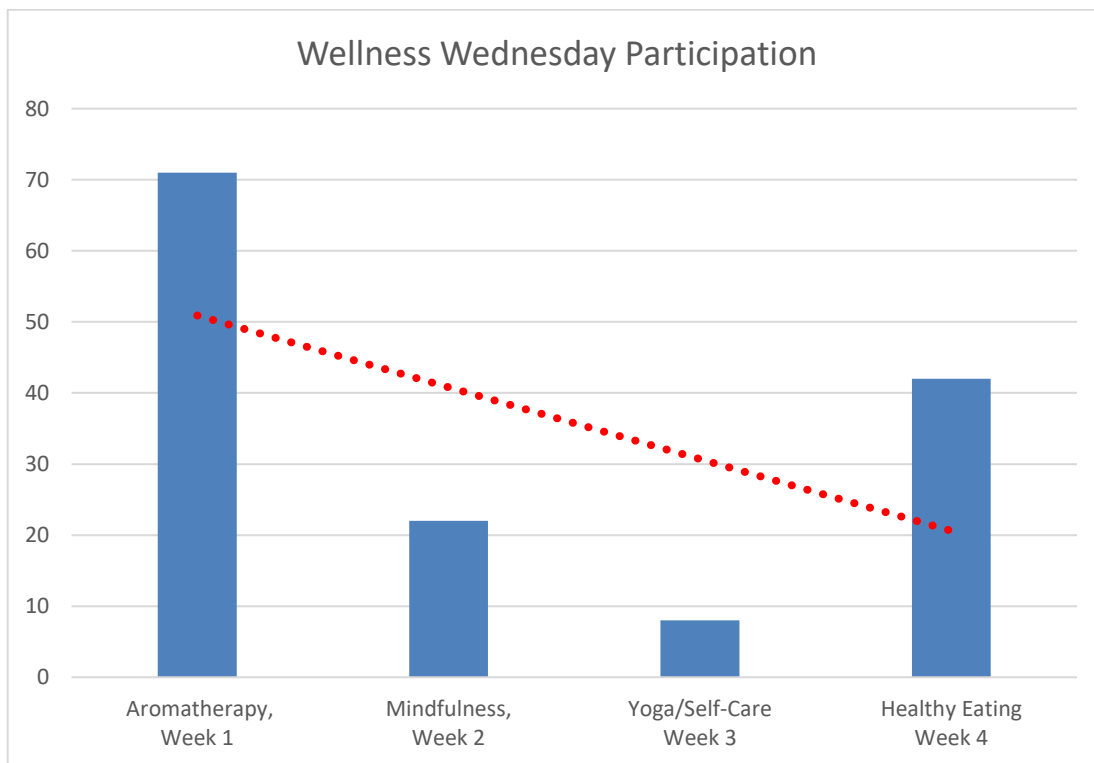


Figure 9

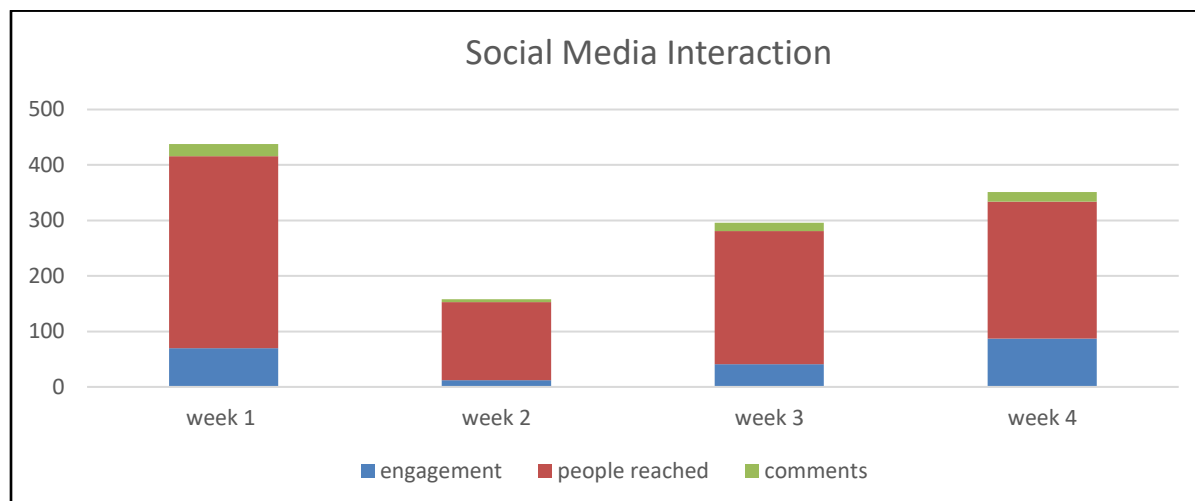
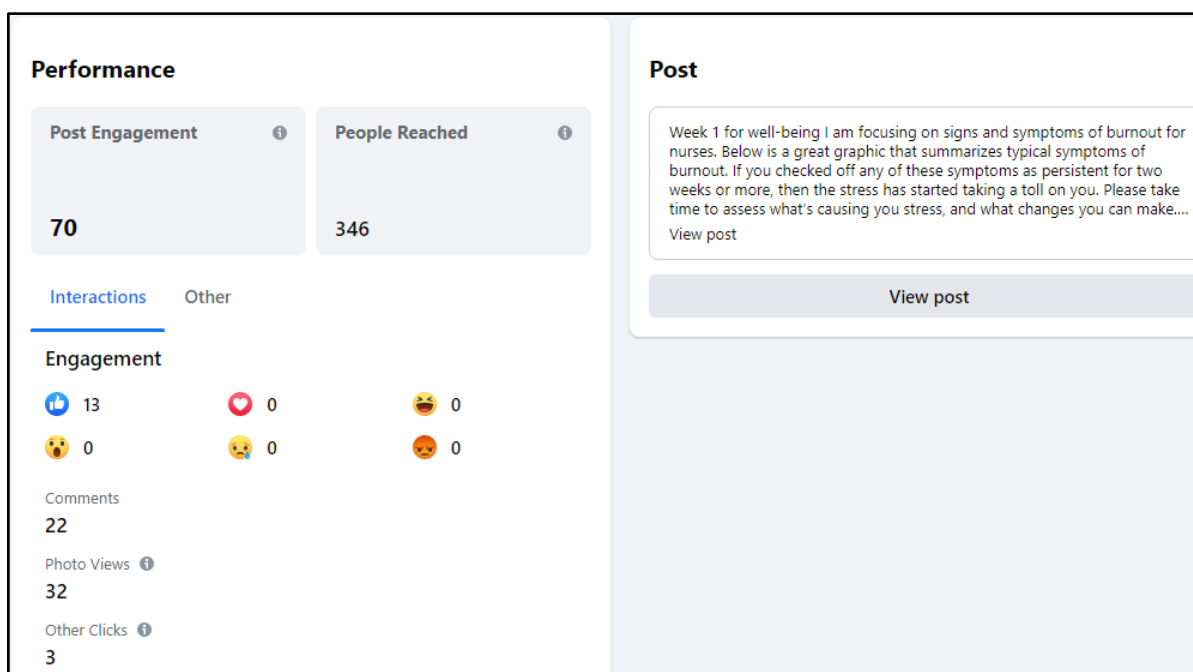


Figure 10



Summary

The results of this quality outcomes project showed that there was not a decrease in the mean NWBI scores post *Wellness-Wednesday* education, indicating that the null hypothesis was true (Figure 4 and Figure 5). The mean NWBI score increased post-intervention from 4.1 to 4.3,

which indicates that the participants reported poorer degrees of well-being post-intervention than pre-intervention. However, the increase in means was not statistically significant since the significance was above 0.05 ($p=0.75$) (Figure 3).

Despite the NWBI scores not significantly decreasing post educational intervention, there were many positive outcomes of this DNP project. The education focusing on well-being, self-care, symptoms of burnout, and internal resources for employee wellness proved to be beneficial for the participants at WHS as evidenced by a 14% improvement in scores for knowing the symptoms of burnout, a 24% increase in participant's feeling that WHS cares about their well-being, and an 18% increase in participants feeling more comfortable speaking to their leader about well-being (Table 1). For nurses to be able to adequately care for others, they must first feel supported by their leaders and organization (National Academy of Sciences, Engineering, and Medicine [NASEM], 2021).

Both pre-implementation and post-implementation survey results had a mean NWBI score of greater than 2, indicating that the participants at WHS are at higher risk for poor well-being (Figure 4 and Figure 5). However, the percentage of high-risk NWBI scores post-intervention decreased from 82% to 79% (Figure 6). It could be suggested that by providing proper education on burnout and well-being, the acute care nurses were able to answer the NBWI survey questions better when completing the post-intervention survey versus the pre-intervention survey questions.

The strengths of this DNP project were the use of a validated NWBI tool as part of the project survey (Appendix D) and the use of existing educational flyers from national healthcare resources (Appendices N, O, P, Q) (WBI, 2020b). Organizational support and collaboration with the Director of Wellness and Employee Assistance Program Manager also strengthened the interdisciplinary component of the project and ensured incorporation of their departmental needs

as well. The option to use the internal nursing Facebook page as an easy way to disseminate education was also a strength for this project and led to more interaction and participation than the in-person *Wellness Wednesday* activities.

Interpretation

Because the participants had a mean NWBI score of above 2 both pre- and post-intervention, research shows that the acute care nurses at WHS are at a higher risk for poor well-being and burnout than most (WBI, 2020b). According to the NWBI tool, this means that the nurses at WHS are at a four times higher risk for burnout and are twice as likely to experience severe fatigue, poor overall quality of life, risk of causing an error that affects patient care, and are twice as likely to leave the organization within the next two years (WBI, 2020b). The opportunity costs that this project has presented is that the organization must focus on improving nurse well-being and preventing burnout, otherwise they will continue to experience increasing levels of turnover and potential patient safety errors. Mental health issues in clinicians have escalated post pandemic and has resulted in compromised healthcare quality and safety (Melnyk, 2022). Healthcare provider burnout and poor well-being is estimated to cost the U.S. \$4.6 billion per year in absenteeism and turnover (Melnyk, 2022).

The aim of the DNP project was to educate healthcare professionals on how to identify burnout and provide organizational opportunities for improving well-being in acute care nurses, both of which were met. The first objective, to decrease the NWBI scores post-implementation of an educational program that focuses on well-being, was not met due to the mean NWBI scores increasing from 4.1 (pre) to 4.3 (post) (Figure 4 and Figure 5). The second objective, to implement a well-being awareness program to 100% of the acute care nursing departments that consisted of printed materials, in-person *Wellness Wednesday* activities, and social media posting

was met. The third objective, to improve rates of engagement with *Wellness Wednesday* activities as evidenced by increasing participation each week was not met (Figure 8).

The DNP student determined that the most successful way to disperse education was through social media posts and the in-person *Wellness Wednesday* activities were least successful (Figure 8, Figure 9, and Figure 10). However, participants stated that they prefer a combination method for learning new information, thus it is important to continue to deliver education through print, staff meetings, face-to-face interactions, and social media to be the most successful at reaching acute care nurses (Figure 7). While participation from the acute care nurses were low, there was perceived positive engagement from their nursing leaders and the administrative team. The importance of nurse well-being and the focus of preventing nurse burnout has now become a more normal talking point in leadership meetings and this DNP project has been the catalyst for this change.

Limitations

There were several limitations that presented themselves during the DNP project. The most pronounced was the lack of survey participation, which was 15% pre-implementation and 11% post-implementation. According to Lindemann (2021), the average standard response rate for online surveys is 33%. Poor participation in the in-person *Wellness Wednesday* activities (37%) was also a key factor in determining appropriate teaching/learning methods for this topic. During the time of study, the organization experienced multiple changes in leadership due to an internal rifting of employees, which likely played a role in both the lack of participation by employees and the high level of burnout that the WHS nurses stated. Additional factors include the period of study, since many employees are off for summer vacations during the month of July, and the consistently high turnover rates in the nursing departments being studied. Efforts made to

minimize and adjust for limitations included extended the survey window for completion from one week to two weeks and being physically present for *Wellness Wednesday* activities and discussion in each of the participating nursing departments.

Conclusion

Nurses at WHS are at higher risk for poor well-being and burnout than most, both pre and post intervention. The aims of the DNP project were to educate healthcare professionals on how to identify burnout and provide organizational opportunities for improving well-being in acute care nurses, both of which were met. Implications for practice are that we, as professional nurses, need to normalize discussions surrounding nurse well-being and prevention of burnout. Local change at the project site will include utilization of free resources from IHI's Psychological PPE and ANA's Healthy Nurse Healthy Nation to continue normalizing professional well-being and create the changes that will sustain this initiative.

Additional plans at the project site include continuing the interdisciplinary workgroup with the EAP Manager and Corporate Wellness Director and officially designating each Wednesday at the facility as *Wellness Wednesday*. By expanding on the new *Wellness Wednesday* platform, the DNP student, along with the project site's leadership team, can continue to move forward with the positive change and momentum that this project has created. On a national context, nurses can promote the works of Mate (2022) and Nundy et al. (2022) on their efforts to expand the Triple Aim to the Quintuple Aim. Legislative and regulatory advocacy for nurse well-being can be accomplished through membership with the ANA (American Nurses Association Enterprise, n.d.). Nurses can also take a legislative pledge with project *RN ACTION* (RN ACTION, 2020).

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Appendix A

IHI's PPE Infographic

Your Psychological PPE






to Promote Mental Health and Well-Being








Institute for
Healthcare
Improvement

These recommendations are based on a review of published literature and the experience of health systems. For more information visit [ihl.org](http://www.ihl.org).

Individual

-  → Take a day off and create space between work and home life
-  → Avoid publicity and media coverage about COVID-19
-  → Receive mental health support during and after the crisis
-  → Facilitate opportunities to show gratitude
-  → Reframe negative experiences as positive and reclaim agency

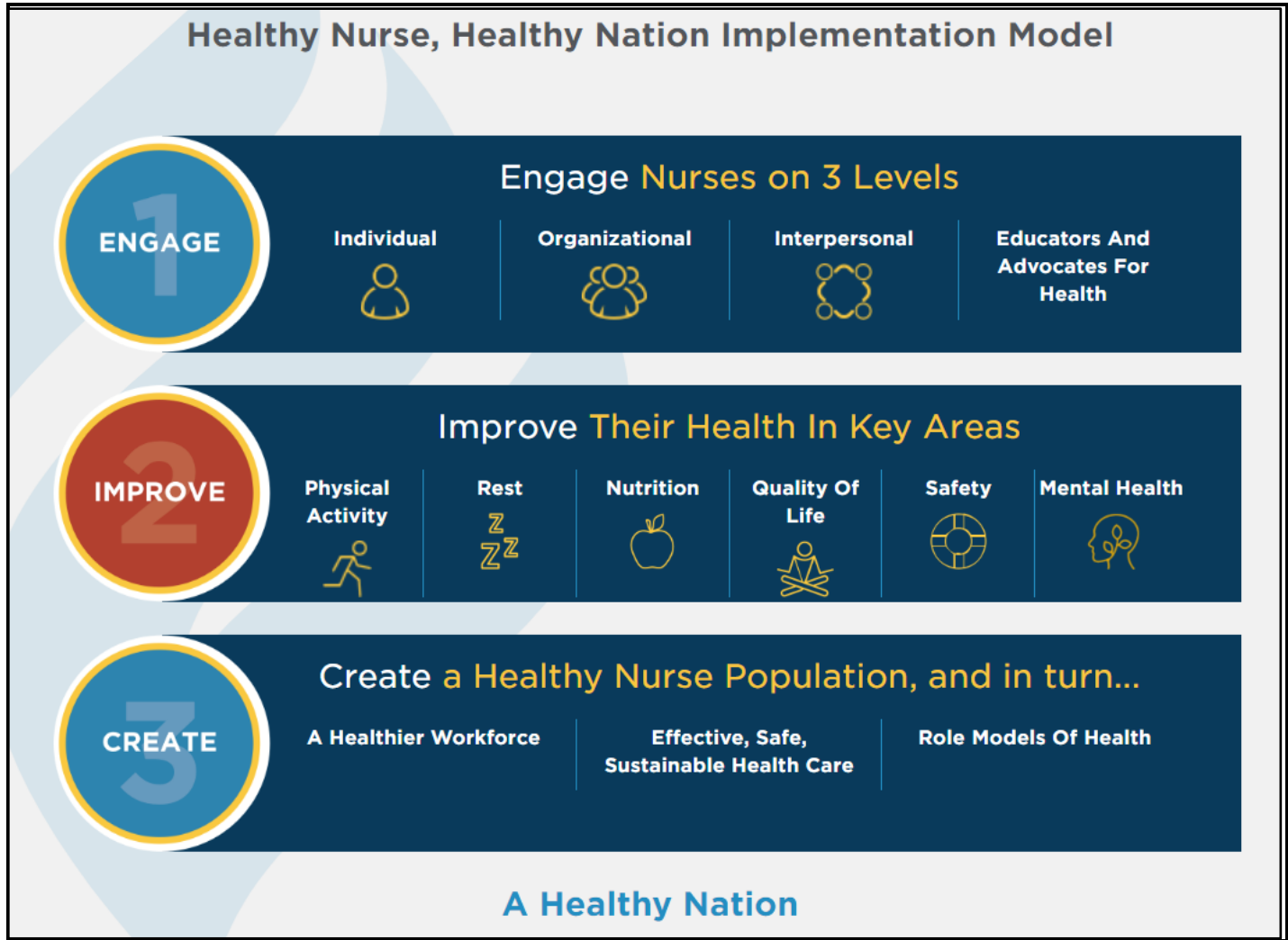
Team Leader

-  → Limit staff time on site/shift
-  → Design clear roles and leadership
-  → Train managers to be aware of key risk factors and monitor for any signs of distress
-  → Make peer support services available to staff
-  → Pair workers together to serve as peer support in a "buddy system"

<http://www.ihl.org/resources/Pages/Tools/psychological-PPE-promote-health-care-workforce-mental-health-and-well-being.aspx>

Appendix B


ANA's *Healthy Nurse Healthy Nation*








<https://www.healthynursehealthynation.org/about/about-hnbn/>

Appendix C

ANA's Well-Being Initiative Infographic









Resources to support the mental health and resilience of nurses.

Nurses' Guide to Mental Health Support Services


As a nurse on the front lines of managing care during the COVID-19 pandemic, you are encountering unique challenges and stressors unlike any other. The realities of the situation are changing your ability to provide care to your patients, spend time with your family, and go about your daily life. The stress may be affecting you physically, interpersonally, and emotionally more than anything you've ever experienced.

You will likely feel a range of reactions to stress and trauma you experience during this pandemic. What might this look like for you? **Here are some common symptoms of excessive stress:**

- 
Physical Symptoms: rapid heart rate, muscle tension, headaches, GI distress, difficulty breathing, high startle response, nausea, nightmares or flashbacks, chronic exhaustion.
- 
Sleep Disturbance: nightmares, trouble falling asleep or staying asleep.
- 
Emotional Responses: anger, fear, frustration, irritability, anxiety, sadness, guilt, difficulty maintaining emotional balance.
- 
Difficulty Thinking Clearly: Disorientation or confusion, difficulty problem-solving or making decisions, difficulty concentrating or remembering instructions.
- 
Problematic or Risky Behaviors: Unnecessary risk taking, increased use of alcohol or drugs to numb.
- 
Social Impacts: blaming others, conflicts with coworkers or family members, withdrawal and isolation, becoming clingy or needy.

For many, these feelings will subside with time as we begin to recover. The important thing is to develop coping mechanisms and find the support you need to address this stress. This support will look different for each person.

You are not alone. There is help and support available.


WHEN TO SEEK IMMEDIATE HELP

If you feel overwhelmed by sadness, depression, anxiety, or hopelessness, or have had or begun to act on thoughts of killing or hurting yourself, **call 911**. You can also call or text one of these crisis hotlines for immediate response:

National Suicide Prevention Lifeline:
1-800-273-TALK (8255)


SAMHSA Disaster Distress Helpline:
1-800-985-5990 or text TalkWithUs to 66746

Crisis Text Line:
Text HOME to 741741

1

Appendix D

Well-Being Index (WBI) Scoring

	
<h3>Scoring</h3> <p>Original items (1-7) are answered using a simple yes/no format. One point is assigned for each “yes”</p>	
<p>Table 1. Nurse WBI Scoring</p>	
	Points assigned
1. Have you felt burned out from your work?	1
2. Have you worried that your work is hardening you emotionally?	1
3. Have you often been bothered by feeling down, depressed, or hopeless?	1
4. Have you fallen asleep while sitting inactive in a public place?	1
5. Have you felt that all the things you had to do were piling up so high that you could not overcome them?	1
6. Have you been bothered by emotional problems (such as feeling anxious, depressed, or irritable)?	1
7. Has your physical health interfered with your ability to do your daily work at home and/or away from home?	1
8. The work I do is meaningful to me	
a low level of meaning in work (response option of a 1 or 2)	+1
a neutral level of meaning in work (response option of 3 to 5 on the 7-point Likert scale)	0
A high level of meaning in work (response option of a 6 or 7 on the 7-point Likert scale)	-1
9. My work schedule leaves me enough time for my personal/family life	
lower satisfaction with work-life integration (e.g. disagree; strongly disagree)	+1
Neutral	0
Higher satisfaction with work-life integration (agree, strongly agree)	-1
<p>The total score for the Nurse WBI ranges from -2 (lowest risk) to 9 (highest risk).</p>	

Appendix E

Well-Being (WBI) Interpretation of Results



WELL-BEING
index

Interpretation of Results

Mean and standard deviation can be computed for the sample and compared to normative data in the below tables. The threshold score provides a way to estimate the risk of distress in a group of individuals scoring at or above a given level and is most useful for setting a cutoff score to identify a subset of individuals for further evaluation or who may be at greater risk for their distress contributing to a personal or professional consequence.

Table 2. Nurse WBI Scores in a National Sample of US Nurses

	WBI N = 3802
Median Score	1.0
Mean Score (SD)	
Overall	1.52 (2.64)
Men	2.08 (2.88)
Women	1.48 (2.62)
Percent with 'at-risk score' ¹	
Overall	47.47%
Men	54.75%
Women	46.89%

¹ Defined as a score ≥ 2 for US nurses using the Nurse WBI

Appendix F

Well-Being Index (WBI) Predictive Validity



WELL-BEING
index

Predictive Validity

An eWell-Being Index score ≥ 2 (higher score = greater risk). In a sample of US nurses, those with a Well-Being Index score ≥ 2 were at greater risk for a number of adverse outcomes, including:

- 4 fold higher risk of burnout
- 2 fold higher risk of severe fatigue
- 2 fold higher risk of poor overall quality of life
- 2 fold higher risk of recent patient care error
- 2 fold higher risk of moderate or greater intent to leave their current position for reasons other than retirement in the next 24 months

Table. 4

Outcome Variable	LR (95% CI)
Burnout	4.43 (95% CI 3.25, 6.07)
High Fatigue	2.34 (95% CI 1.76, 3.09)
Low QOL	2.38 (95% CI 1.79, 3.09)
Below average job performance	2.18 (95% CI 1.59, 3)
Patient care error	2.02 (95% CI 1.17, 2.84)
Intent to leave	2.43 (95% CI 1.73, 3.44)

Appendix G

Well-Being Index (WBI) Area Under the Curve



WELL-BEING
index

Area Under the Curve

Area Under the Curve for Efficacy of the 9-item Well-Being Index for Identifying High Overall Quality of Life (QOL), Low Overall QOL, Fatigue, Burnout, Recent Suicidal Ideation, Recent medical error, Moderate or Higher Intent to Leave, Above Average Absenteeism, and Low Job Performance.

Table 7.

	Area Under Curve
Population Sample	
High QOL	0.771
Low QOL	0.808
High Fatigue	0.742
Burnout	0.879
Suicidal Ideation	0.822
Medical error	0.730
Intent to leave	0.684
Above average absenteeism	0.529
Low Job Performance	0.692

Relevant Publication

Dyrbye LN1, Johnson PO, Johnson LM, Satele DV, Shanafelt TD. Efficacy of the Well-Being Index to Identify Distress and Well-Being in U.S. Nurses. *Nurs Res.* 2018 Nov/Dec;67(6):447-455. doi: 10.1097/NNR.0000000000000313.

Appendix H

10 Caritas Processes

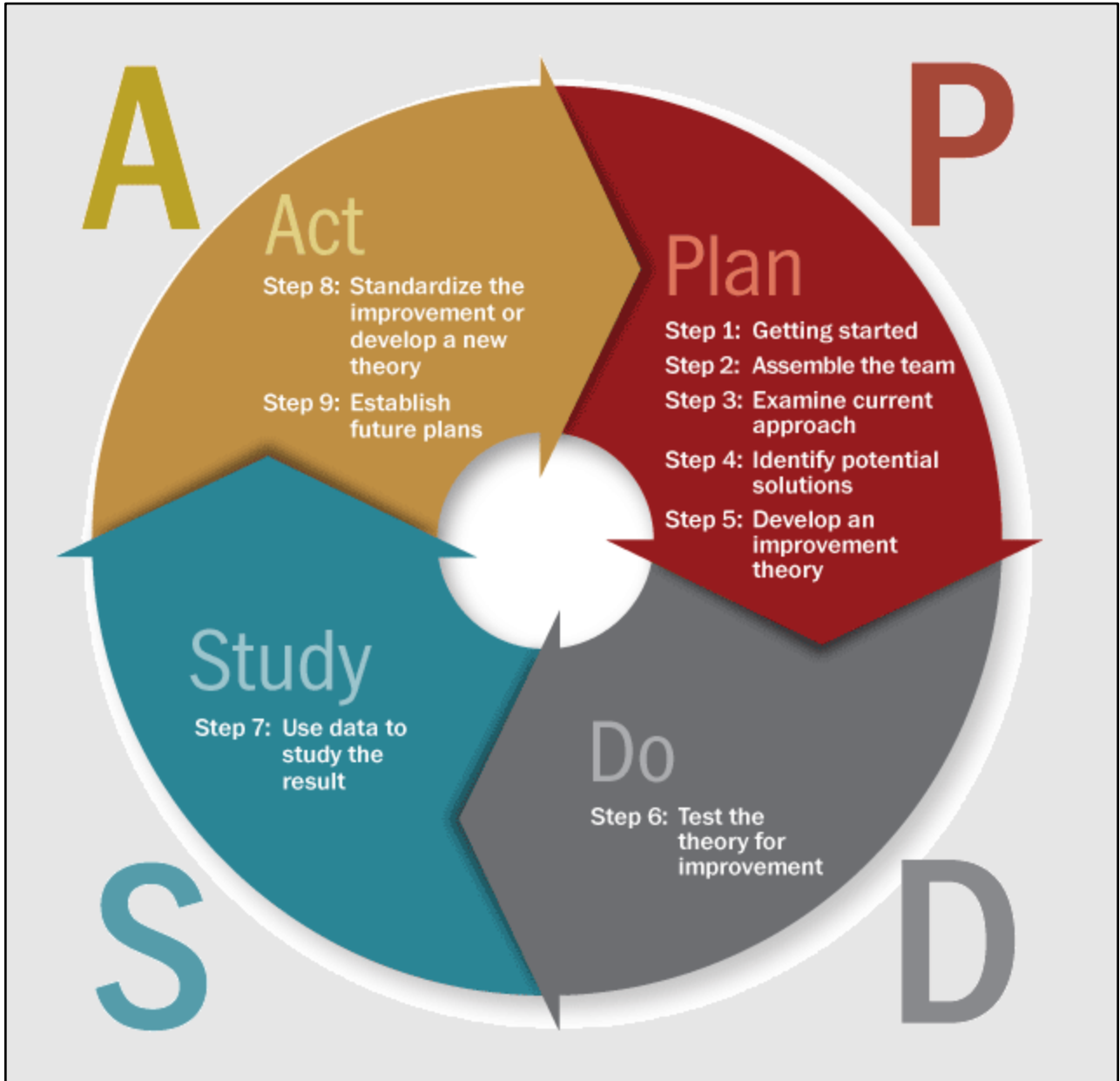
10 CARITAS PROCESSES®

1. Sustaining humanistic-altruistic values by practice of loving-kindness, compassion and equanimity with self/others.
2. Being authentically present, enabling faith/hope/belief system; honoring subjective inner, life-world of self/others.
3. Being sensitive to self and others by cultivating own spiritual practices; beyond ego-self to transpersonal presence.
4. Developing and sustaining loving, trusting-caring relationships.
5. Allowing for expression of positive and negative feelings - authentically listening to another person's story.
6. Creatively problem-solving-'solution-seeking' through caring process; full use of self and artistry of caring-healing practices via use of all ways of knowing/being/doing/becoming.
7. Engaging in transpersonal teaching and learning within context of caring relationship; staying within other's frame of reference-shift toward coaching model for expanded health/wellness.
8. Creating a healing environment at all levels; subtle environment for energetic authentic caring presence.
9. Reverentially assisting with basic needs as sacred acts, touching mindbodyspirit of spirit of other; sustaining human dignity.
10. Opening to spiritual, mystery, unknowns-allowing for miracles.



10 CARITAS PROCESSES®
Translations & Reminders

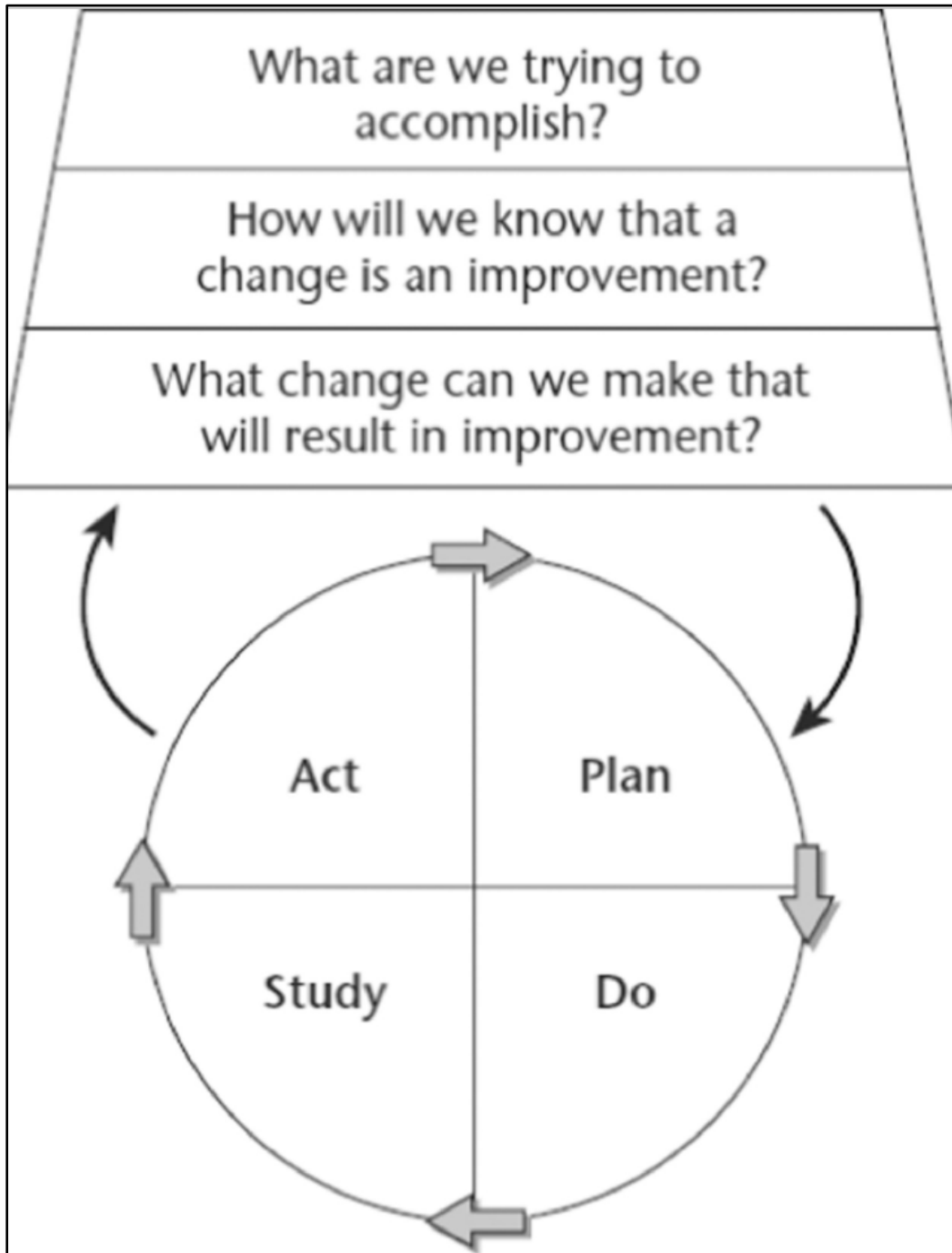
Appendix I
Plan Do Study Act



<http://www.tribaleval.org/wp-content/uploads/2016/05/PDSA-chart-1-1.png>

Appendix J



Plan Do Study Act Part II



Appendix K

Permission for Practice Site

TUN - Use of Wise Health system as Practicum Site for Leah Throckmorton

 Cocke, Thomas B
To  Throckmorton, Leah

Retention Policy 7 Year Permanently Delete (7 years) Expires 11/9/2028

Reply Reply All Forward ...


Wed 11/10/2021 4:24 PM


Leah

As indicated earlier, on behalf of Wise Health System and as General Counsel of the System, I have reviewed the request for you to use Wise Health System as a Practicum site. Given your current employment status, Wise will not require an Affiliation Agreement with Touro University Nevada. Please feel free to contact me or to have TUN contact me directly if you/they have any questions. Thank you!

Tom


Thomas B. Cocke, Jr.
Vice President of Legal Services/General Counsel


 **Wise Health System**
2000 S.FM 51
Decatur, Texas 76234
(940) 626-1915 - direct
(214) 603-7200 - cell
tcocke@wisehealthsystem.com


WITH INNOVATIVE SAFE EXCELLENT


Appendix L

Permission to complete DNP Project



Jennings, Lee Ann
To  Throckmorton, Leah

Retention Policy 7 Year Permanently Delete (7 years) Expires 3/7/2029





 You forwarded this message on 3/8/2022 12:18 PM.

To whom it may concern,

Leah Throckmorton MSN, RN-CCCTM has permission to complete her DNP Project on "improving well-being in acute care nurses post-pandemic" at Wise Health System in Decatur, Texas. Please feel free to contact me if any other questions or concerns.

Sincerely,

LEE ANN JENNINGS MHA,BSN,RN,CEN
CNO/Senior VP of Nursing Services
Wise Health System
Decatur Texas 76234
940-531-8494 cell
940-626-1210 office

 Reply  Reply All  Forward 

Tue 3/8/2022 11:01 AM

Appendix M

Survey: Improving Well-Being in Acute Care Nurses Post-Pandemic

Demographic Information

1. What is your gender?
 - a. Male
 - b. Female
2. What is your age?
 - a. 20-29 years old
 - b. 30-39 years old
 - c. 40-49 years old
 - d. 50-59 years old
 - e. 60 years old or above
3. How many years of experience do you have as a nurse?
 - a. 0-5 years
 - b. 6-10 years
 - c. 11-15 years
 - d. 16-20 years
 - e. More than 20 years
4. What is the highest level of education you have completed?
 - a. Diploma
 - b. Associate degree nursing (ADN)
 - c. Bachelor of Science in Nursing (BSN)
 - d. Master of Science in Nursing (MSN)
 - e. Doctor of Nursing/PhD (DNP)
5. What is your current employment status as an acute care nurse?
 - a. Full-time
 - b. Part-time
 - c. PRN
6. What department do you work in?
 - a. Emergency department (ED)
 - b. Labor and delivery (L&D)
 - c. Intensive care unit (ICU)
 - d. Medical Surgical (MS)

Demographics
Background
NWBI tool
Post-Survey

Appendix M (continued)

7. Which nursing licensure do you have?
- a. Registered nurse (RN)
 - b. Licensed vocational nurse (LVN)
8. Which shift do you work?
- a. Day shift (0700-1900)
 - b. Night shift (1900-0700)
 - c. Mid shift (1100-2300 or 1500-2300 etc.)
 - d. Other

Background

9. Have you participated in a wellness/well-being intervention before?
- a. Yes
 - b. No
10. Do you feel WHS cares about your well-being?
- a. Yes
 - b. No
11. I know how to utilize the mental well-being resources WHS has for me
- a. Yes
 - b. No
12. I feel that focusing on mental and physical well-being is important
- a. Yes
 - b. No
13. I know the symptoms of burnout
- a. Yes
 - b. No
14. I feel confident in speaking to my leaders about my mental well-being
- a. Yes
 - b. No

NWBI

15. Have you felt burned out from work?
- a. Yes
 - b. No
16. Have you worried that your work is hardening you emotionally?
- a. Yes
 - b. No
17. Have you often been bothered by feeling down, depressed, or hopeless?
- a. Yes
 - b. No
18. Have you fallen asleep while sitting inactive in public place?

Appendix M (continued)

a. Yes

b. No

19. Have you felt that all the things you had to do were piling up so high that you could not overcome them?

a. Yes

b. No

20. Have you been bothered by emotional problems (such as feeling anxious, depressed, or irritable?)

a. Yes

b. No

21. Has your physical health interfered with your ability to do your daily work at home and/or away from home?

a. Yes

b. No

22. The work I do is meaningful to me

a. A low level of meaning in work (response option would rank 1 or 2 on Likert scale)

b. A neutral level of meaning in work (response option would rank 3 to 5 on Likert scale)

c. A high level of meaning in work (response option would rank 6 to 7 on Likert scale)

23. My work schedule leaves me enough time for my personal/family life

a. Lower satisfaction with work-life integration (disagree/strongly disagree)

b. Neutral

c. Higher satisfaction with work-life integration (agree/strongly agree)

Post-Survey

24. Did you participate in Wellness Wednesday well-being activities?

a. Yes

b. No

25. Which method of learning did you prefer?

a. Print materials (flyers, newsletters)

b. Social media (Nursing Facebook page)

c. In-person (Wellness cart through your department)

d. Combination of the above

Free text box:

Please provide any feedback you have on Wellness Wednesday for future implications

Appendix N

Identifying Symptoms of Burnout in Nurses

Burnout Signs *for Nurses*



Cognitive

- Focusing or thinking clearly**
You find yourself not listening while taking a patient history.
- Remembering details or conversations**
You have difficulty remembering the medical orders, that you just read.
- Making decisions or problem solving**
Simple questions like, "What do you want for lunch?" are too much.



Physical

- Sleep**
You have trouble falling asleep or staying asleep. You wake up feeling unrested.
- Gastrointestinal issues**
Your bowel movements are no longer regular.
- Headaches**
You find yourself taking pain killers for headaches with increasing dosages and frequencies.



Emotional

- Depersonalization**
You stop seeing your patients as people, but as tasks that you need to get through (take vitals, medicate, next).
- Irritability or frustration**
You don't have the patience for others or changes in your routine.
- Emotionally Numb**
You stop caring and spend your days going through the motions of work.



Behavioral

- Risk-taking**
You stop using PPE.
- Reduced capacity to support your team**
When someone requests support, you don't respond, hoping someone else will.
- Misuse of drugs or alcohol**
You self-medicate to get through the day. The evening glass of wine is a daily bottle.

Appendix O








After Work Checklist

After Work Checklist

At the end of your workday, take these steps to decompress.

For more well-being resources, visit:
[NursingWorld.org/
TheWellBeingInitiative](https://www.nursingworld.org/TheWellBeingInitiative)

- ✓ **Review**
 Acknowledge a challenge you faced, take a deep breath, and let it go.
- ✓ **Reflect**
 However small, consider and appreciate three positives in your day.
- ✓ **Regroup**
 Offer support to your colleagues—and ask for help when you need it.
- ✓ **Reenergize**
 Turn your attention to home. Focus on relaxing and resting.

https://www.nursingworld.org/~4ab553/globalassets/covid19/well-being-initiative_sharegraphic_checklist_-091720a.pdf

Appendix P

Self-Care for Nurses

Self-Care *for Nurses*

Connect with Yourself
Pay attention to your triggers, and to what brings you peace and happiness.

Connect with Someone
Talk with a friend, a relative, or a professional. Seek online therapy for healthcare professionals.

Enroll in an Online Workout or Yoga Session
Check out free classes and personal trainer offers for nurses. Get healthy and feel empowered, too.

Earn CE credits in Self-Care for Nurses
The American Nurses Association offers webinars for nurses. Do something for yourself and your career at once.

Get Outdoors
Find ways to get fresh air and sun. Try having your breakfast or dinner outdoors.

Take a Step
Take a step toward solving problems that you know are causing you stress.

Declutter
Create a 7-minute high-power playlist. Finish tidying before the songs end.

NurseRegistry

<https://www.nurseregistry.com/blog/nurse-burnout/>

Appendix Q

WHS's Employee Assistance Program

WISECares
EMPLOYEE ASSISTANCE PROGRAM

WELLNESS WEDNESDAY
Text (940) 255-8065
OR
Call (940) 539-0683
EAP@WiseHealthSystem.com

WISE Wellness
EMPLOYEE WELLNESS PROGRAM

Burnout

Counseling

Grief

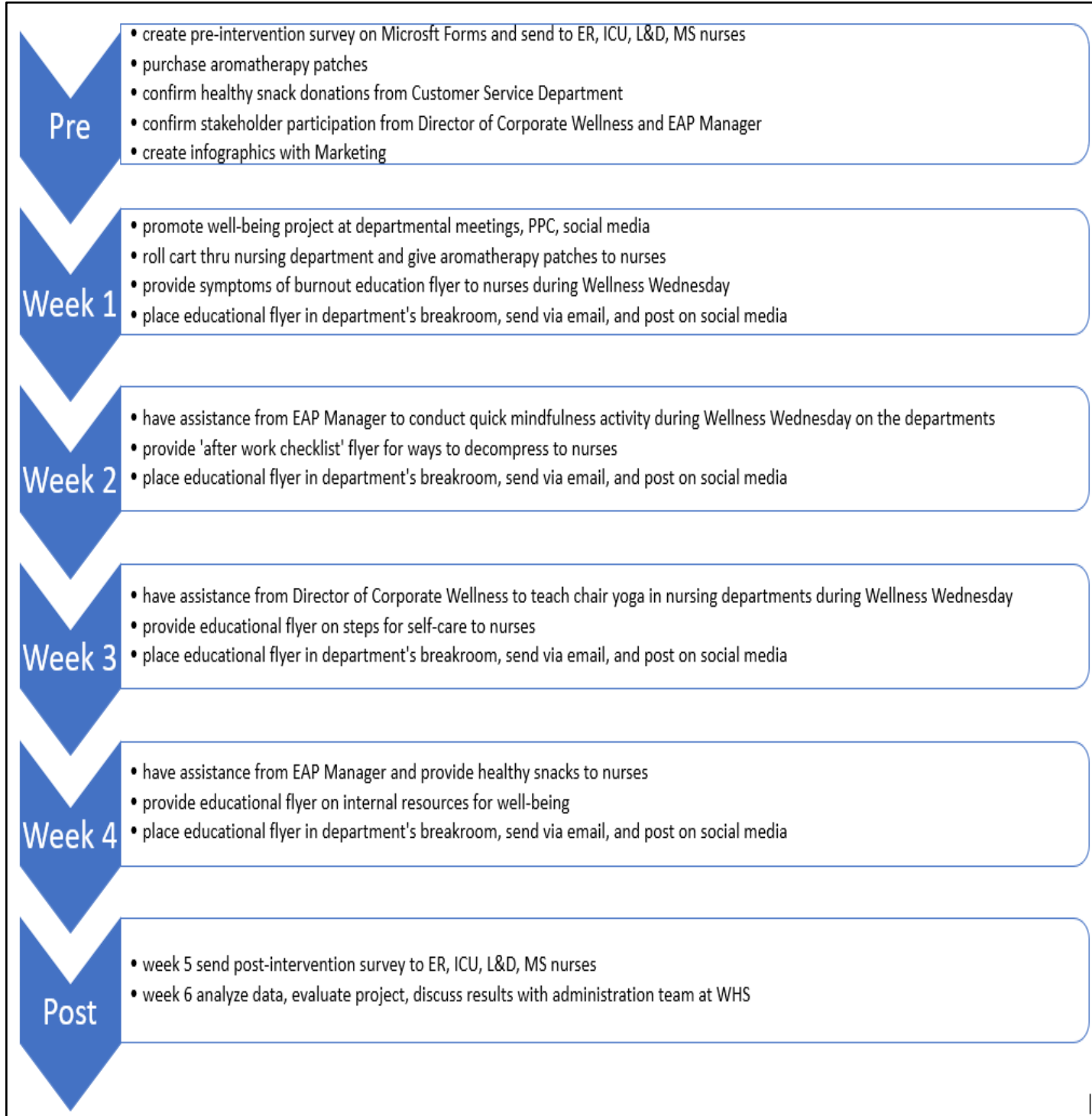
Anxiety

Depression

Self-Care

Appendix R

DNP Project Timeline



Appendix S

Well-Being Index Research Request

WELL-BEING
Index

Well-Being Index Research Request

Corporate Web Services, Inc. (CWS) is pleased to be able to provide the Advanced Practice Provider Well-Being Index, Employee Well-Being Index, Medical Student Well-Being Index, Nurse Well-Being Index, Physician Well-Being Index, and Resident/Fellow Well-Being Index for academic and research purposes.

CWS will provide you with the Well-Being Index for free as long as you agree to certain conditions regarding your use. The conditions described are necessary to ensure that CWS' interests in any possible commercialization are protected and to ensure that the Well-Being Index is used solely for the research reported. Such use shall be for either the completion of the research or one (1) year from the date of this agreement.

[View Terms & Conditions](#)

Research Request Form

Medical Institution*

wise health system

By checking the "I Accept" box you are agreeing to be bound by these

I agree to the terms.*

[Access The Research Document](#)

<https://www.mywellbeingindex.org/research-request?hsLang=en>

Appendix T

Codebook

Codebook		
Item	Variable Code	Response(s) Code
Gender	GEN	1= female 2= male
Participant age	AGE	1= 20-29 years old 2= 30-39 years old 3= 40-49 years old 4= 50-59 years old 5= 60+ years old
Years' Experience as Nurse	EXP	1= 0-5 years 2= 6-10 years 3= 11-15 years 4= 16-20 years 5= 20+ years
Highest Education	EDU	1= Diploma 2= Associate degree nursing (ADN) 3= Bachelor of Science in Nursing (BSN) 4= Master of Science in Nursing (MSN) 5= Doctor of Nursing/PhD (DNP)
Employment status	EMP	1= fulltime 2= part-time 3= PRN
Nursing Department	DEPT	1= Emergency department (ED) 2= Labor and delivery (L&D) 3= Intensive care unit (ICU) 4= Medical Surgical (MS)
Nursing Licensure	LIC	1= Registered Nurse (RN) 2= Licensed Vocational Nurse (LVN)
Nursing Shift	SHIFT	1= Day shift (0700-1900) 2= Night shift (1900-0700) 3= Mid shift (1100-2300 or 1500-2300) 4= Other
Have you participated in a wellness intervention before	INT	1= yes 2= no
Do you feel WHS cares about your wellbeing	WHS	1= yes 2= no
I know how to utilize the mental wellbeing resources WHS has for me	RES	1= yes 2= no
I feel that focusing on mental and physical wellbeing is important	FOCUS	1= yes 2= no
I know the symptoms of burnout	SYMPT	1= yes 2= no
I feel confident in speaking to my leaders about mental wellbeing	CONF	1= yes 2= no
Have you felt burned out from work	BURN	1= yes 2= no
Have you worried that work is hardening you emotionally	WORRY	1= yes 2= no
Have you often been bothered with feeling down depressed or hopeless	FEEL	1= yes 2= no
Have you fallen asleep while sitting inactive in public place	SLEEP	1= yes 2= no
Have you felt that all the things you had to do were piling up so high that you could not overcome them	PILE	1= yes 2= no
Have you been bothered by emotional problems such as feeling anxious depressed or irritable	EMO	1= yes 2= no
Has your physical health interfered with your ability to do your daily work at home and or away from home	PHYS	1= yes 2= no
The work I do is meaningful to me	MEAN	1= low level of meaning 2= neutral 3= high level of meaning
My work schedule leaves me enough time for my personal family life	SCHED	1= lower satisfaction with work-life 2= neutral 3= higher satisfaction with work-life
Did you participate in Wellness Wednesday wellbeing activities	WED	1= yes 2= no
Which method of learning did you prefer	LEARN	1= print 2= social media 3= in-person 4= combination of the above

Appendix U

Statistics Plan Worksheet



DNP Project: Statistics Plan Worksheet

Name: Leah Throckmorton


Date: 3/26/22



Section	Description
Project Title	Improving Well-Being in Acute Care Nurses Post-Pandemic
Project Purpose	The aim of this scholarly project is to educate healthcare professionals on how to identify burnout and provide organizational opportunities for improving well-being and resilience in acute care nurses.
Project Question	Does implementing a well-being program improve Nurse Well-being Index (NWBI) scores in acute care nurses during the 4-week DNP project timeframe?
Project Design (general description how treatments are assigned/observational/repeated measures of X # of people, etc.)	Quasi-experimental quantitative design
Population of Interest	Acute care nurses in the emergency room, labor & delivery, intensive care unit, and medical surgical units.
Variables	Independent Variable(s) – comprehensive online resources for workplace wellness, including weekly on-unit activities for staff. Dependent Variable(s) – NWBI score Relevant Constant(s) - acute care nurses that participate
Sample Size	acute care nursing departments of ED, labor and delivery (L&D), intensive care unit (ICU), and medical surgical (MS). These departments have a total of 159 registered nurse (RN) and licensed vocational nursing (LVN) staff with the following breakdown: ER (n=24), MS (n=69), ICU (n=48), L&D (n=18). N=159
Recruitment Methods	Acute care nurses will be recruited through internal Nursing Facebook page and direct internal email invitation
Instruments/Tools (Validity/Reliability)	Will utilize the existing Nurse Well-Being Index (NWBI) tool. NWBI tool is already proven to be validated and reliable and does not require permission to be used. The total score for the NWBI ranges from -2 (lowest risk) to 9 (highest risk). A NWBI ≥ 2 are at greater risk for adverse outcomes (see Appendix C below).
Proposed Descriptive Statistics and Statistical Test(s)	Statistical test: Paired t- test. Descriptive statistics: Frequency distribution for number of participants (NWBI and program); measures of central tendency (mean/median/mode) and measures of variability (rang, standard deviation) for NWBI scores.

Appendix V

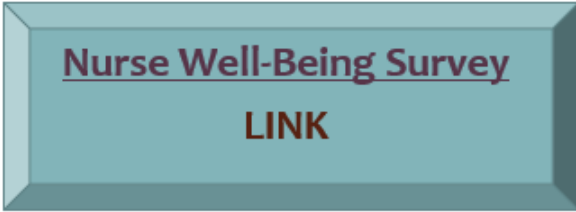

Pre-Implementation Survey Flyer



IMPROVING WELL-BEING IN ACUTE CARE NURSES

HELLO WHS NURSES!

I AM CURRENTLY IN MY DNP PROGRAM AND CONDUCTING A SCHOLARLY PROJECT WHERE I HOPE TO BRING AWARENESS (AND INTERVENTIONS) TO IMPROVE NURSE WELL-BEING AT WHS. TO ASSESS FOR IMPROVEMENT, I NEED TO CONDUCT A PRE-PROJECT SURVEY **ON HOW YOU CURRENTLY FEEL REGARDING YOUR WELL-BEING**. THIS SURVEY WILL BE OPEN UNTIL JULY 4TH AND IS COMPLETELY VOLUNTARY. THIS SURVEY IS FOR MY PERSONAL USE FOR DNP PROGRAM AND IS NOT ASSOCIATED WITH WHS. HOWEVER, I WOULD GREATLY APPRECIATE YOUR RESPONSES! THIS PROJECT WILL BE FOCUSED ON NURSES IN THE FOLLOWING DEPARTMENTS ONLY: ER, L&D, ICU, MEDSURG



FOR MORE INFORMATION CONTACT: LTHROCKMOR@WISEHEALTHSYSTEM.COM

Appendix W

Pre-Implementation Survey

Improving Well-Being in Acute Care Nurses Post-Pandemic

Hello WHS Nurses. I am currently in my DNP program and conducting a scholarly project where I hope to bring awareness (and interventions) to improve nurse well-being at WHS. To assess for improvement, I need to conduct a pre-project survey on how you **CURRENTLY** feel regarding your well-being. This survey will be open until July 4, 2022 and is **completely voluntary** and is for my personal use for my DNP program and is NOT associated with WHS. However, I would greatly appreciate your responses! This project will be focused on nurses in the following departments **ONLY: ER, L&D, ICU, MedSurg**

Poor well-being can lead to negative outcomes for nurses, patients, and employers. Acute care nurses frequently provide care to patients that experience traumatic events, thus are at an increased risk for developing high levels of burnout and compassion. Without an intervention to focus on improving well-being and resilience, acute care nurses will suffer dissatisfaction and may choose to leave the profession. The consequences of nurses with high levels of burnout, compassion fatigue, and poor well-being are high turnover rates resulting in higher costs to the organization, and decreased quality of care, leading to poor patient outcomes. The project question seeks to determine if an educational initiative focusing on improving well-being will result in a statistically significant change in the nurse well-being index (NWBI) scores for acute care nurses. The purpose of this scholarly project is to decrease the level of burnout and dissatisfaction and increase the well-being of acute care nurses by instituting a well-being educational initiative within the organization. The clinical question of this scholarly project is:

Does implementing a well-being program improve Nurse Well-being Index (NWBI) scores in acute care nurses during the 4-week DNP project timeframe?

Appendix W

Pre-Implementation Survey (continued)

* This form will record your name, please fill your name.

1. What is your gender?

- Woman
- Man
- Non-binary
- Prefer not to say

2. What is your age?

- 20-29 years old
- 30-39 years old
- 40-49 years old
- 50-59 years old
- 60 years old or above

3. How many years of experience do you have as a nurse?

- 0-5 years
- 6-10 years
- 11-15 years
- 16-20 years
- more than 20 years

4. What is your highest level of education you have completed?

- Diploma
- Associate degree in Nursing (ADN)
- Bachelor of Science in Nursing (BSN)
- Master of Science in Nursing (MSN)
- Doctor of Nursing (DNP)/PhD

5. What is your current employment status as an acute care nurse?

- full-time
- part-time
- PRN

Appendix W

Pre-Implementation Survey (continued)

<p>6. Which department do you work in?</p> <p><input type="radio"/> Emergency Department (ED)</p> <p><input type="radio"/> Labor and Delivery (L&D)</p> <p><input type="radio"/> Intensive Care Unit (ICU)</p> <p><input type="radio"/> Medical Surgical (MS)</p>
<p>7. Which nursing licensure do you have?</p> <p><input type="radio"/> Registered Nurse (RN)</p> <p><input type="radio"/> Licensed Vocational Nurse (LVN)</p>
<p>8. Which nursing shift do you work?</p> <p><input type="radio"/> day shift (0700-1900)</p> <p><input type="radio"/> night shift (1900-0700)</p> <p><input type="radio"/> mid shift (1100-2300 or 1500-2300)</p> <p><input type="radio"/> other</p>
<p>9. Have you participated in a wellness/well-being intervention before?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>
<p>10. Do you feel WHS cares about your well-being?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>
<p>11. I know how to utilize the mental well-being resources WHS has for me.</p> <p><input type="radio"/> yes</p> <p><input type="radio"/> No</p>
<p>12. I feel that focusing on mental and physical well-being is important.</p> <p><input type="radio"/> yes</p> <p><input type="radio"/> No</p>
<p>13. I know the symptoms of burnout</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>
<p>14. I feel confident in speaking to my leader(s) about my mental well-being.</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>
<p>15. Have you felt burned out at work?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>

Appendix W**Pre-Implementation Survey (continued)**

16. Have you worried that your work is hardening you emotionally?

Yes

No

17. Have you often been bothered by feeling down, depressed, or hopeless?

Yes

No

18. Have you fallen asleep while sitting inactive in a public place?

Yes

No

19. Have you felt that all things you had to do were piling up so high that you could not overcome them?

Yes

No

Appendix W

Pre-Implementation Survey (continued)

20. Have you been bothered by emotional problems (such as feeling anxious, depressed, or irritable)?

- Yes
- No

21. Has your physical health interfered with your ability to do your daily work at home and/or away from home?

- Yes
- No

22. The work I do is meaningful to me

- A low level of meaning in work (response option would rank 1 to 2 on a Likert scale)
- A neutral level of meaning in work (response option would rank 3 to 5 on a Likert scale)
- A high level of meaning in work (response option would rank 6 to 7 on Likert scale)

23. My work schedule leaves me enough time for my personal/family life

- lower satisfaction with work-life integration (disagree/strongly disagree)
- neutral
- higher satisfaction with work-life integration (agree/strongly agree)

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

Appendix W

Pre-Implementation Survey (continued)

The screenshot shows a survey settings interface with a teal header bar. The header contains three items: a 'Preview' button with an eye icon, a 'Theme' button with a paint palette icon, and a 'Collect responses' button. Below the header is a 'Settings' section with three main areas: 'Who can fill out this form', 'Options for responses', and 'Response receipts'. Each area contains several checkboxes and radio buttons.

Who can fill out this form

- Anyone can respond
- Only people in my organization can respond
 - Record name
 - One response per person
- Specific people in my organization can respond

Options for responses

- Accept responses
- Start date
- End date
- Shuffle questions
- Show progress bar ⓘ
- Customize thank you message

Thank you very much for taking the time to complete this survey for my DNP project.

Response receipts

- Allow receipt of responses after submission
- Get email notification of each response
- Get smart notification emails to track ⓘ the response status

Appendix X

Pre-Implementation Survey Email

asking for help for DNP project from your nurses.

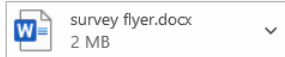


Throckmorton, Leah

To ● Souther, Kellye; ● Fortenberry, Cheryl; ● Miner, Brenda; ● White, Kaylee E; ○ Banks-Garrett, Darla
Cc ● Throckmorton, Leah

Reply Reply All Forward ...

Mon 6/13/2022 2:00 PM



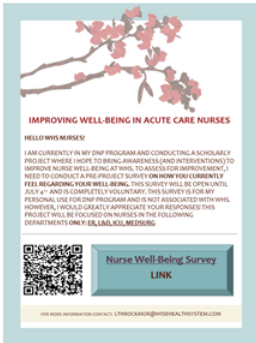
Kellye/Cheryl/Brenda/Darla,

I am asking if yall can help me with a school project by sending this email to your staff. I will also be posting the below flyer in your break rooms tomorrow. I am currently in my DNP program and conducting a scholarly project where I hope to bring awareness (and interventions) to improve nurse well-being at WHS. To assess for improvement, I need to conduct a pre-project survey on how nurses CURRENTLY feel regarding their well-being. This voluntary survey is completely anonymous, takes less than two minutes to complete, and will be open until July 4, 2022. This is for my personal use for DNP program and is NOT associated with WHS (although I have received approval to conduct the project at our site). I would greatly appreciate everyone's responses!

This project will be focused on nurses in the following Decatur departments ONLY: ER, L&D, ICU, MedSurg. Here is the link to the quick survey: [Nurse Well-Being Survey Link](#)

Excerpt from my thesis:

Poor well-being can lead to negative outcomes for nurses, patients, and employers. Acute care nurses frequently provide care to patients that experience traumatic events, thus are at an increased risk for developing high levels of burnout and compassion. Without an intervention to focus on improving well-being and resilience, acute care nurses will suffer dissatisfaction and may choose to leave the profession. The consequences of nurses with high levels of burnout, compassion fatigue, and poor well-being are high turnover rates resulting in higher costs to the organization, and decreased quality of care, leading to poor patient outcomes. The project question seeks to determine if an educational initiative focusing on improving well-being will result in a statistically significant change in the nurse well-being index (NWBBI) scores for acute care nurses. The purpose of this scholarly project is to decrease the level of burnout and dissatisfaction and increase the well-being of acute care nurses by instituting a well-being educational initiative within the organization. The clinical question of this scholarly project is: Does implementing a well-being program improve Nurse Well-being index (NWBBI) scores in acute care nurses during the 4-week DNP project timeframe?



Thank you for your help!!

Leah Throckmorton MSN, RN-CCCTM
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Appendix Y

Social Media Post Pre-Implementation

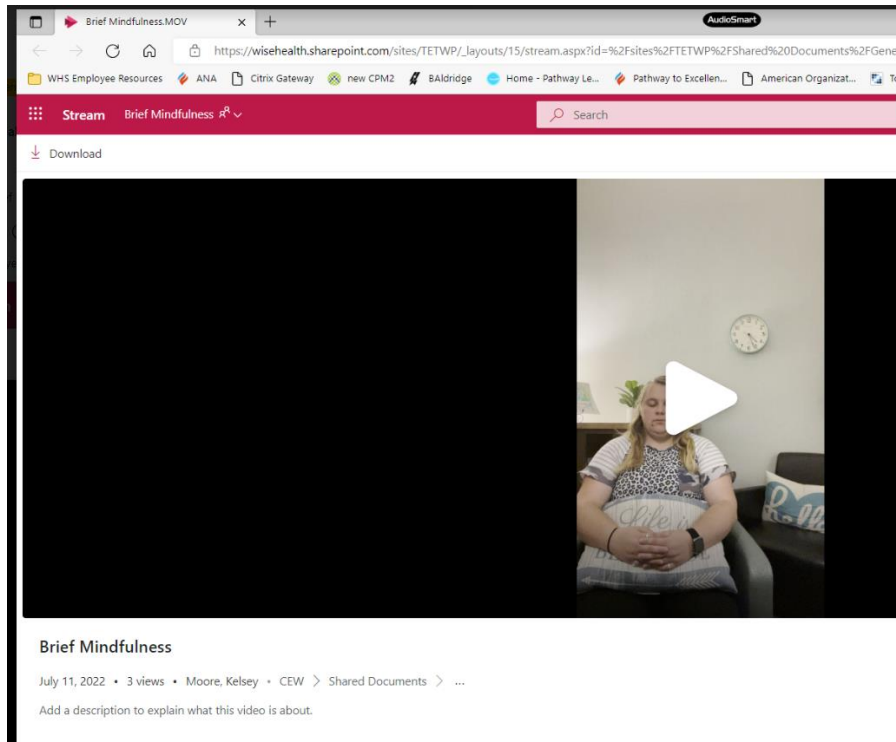
The screenshot shows a Facebook group page for "Wise Health System Nursing Services". At the top, there is a navigation bar with icons for home, video, people, a document, and a folder. Below this is a blue banner with the text "Group by Leah Throckmorton" and an "Edit" button. The group name "Wise Health System Nursing Services" is prominently displayed, along with "Private group · 401 members" and a row of member profile pictures. To the right, there are buttons for "Joined" and "+ Invite". Below the group name is a horizontal menu with tabs for "About", "Discussion", "Mentorship", "Rooms", "Topics", "Members", "Events", "Media", and "Files".

The main content area is divided into two columns. The left column features a text input field with the placeholder "Write something...", a "Photo/video" button, and a "Room" button. Below this is a "Featured" section with an "Add" button and a note that "Members won't see this section when it's empty." The "Newest Activity" section shows a post from Leah Throckmorton, the group admin, posted 1m ago. The post is titled "Nurse Well-Being Survey" and contains the following text: "Attention nurses in ER, L&D, ICU, and MedSurg. I AM CURRENTLY IN MY DNP PROGRAM AND CONDUCTING A SCHOLARLY PROJECT WHERE I HOPE TO BRING AWARENESS (AND INTERVENTIONS) TO IMPROVE NURSE WELL-BEING AT WHS. TO ASSESS FOR IMPROVEMENT, I NEED TO CONDUCT A PRE-PROJECT SURVEY ON HOW YOU CURRENTLY FEEL REGARDING YOUR WELL-BEING. THIS SURVEY WILL BE OPEN UNTIL JULY 4th AND IS COMPLETELY VOLUNTARY. HOWEVER, I WOULD GREATLY APPRECIATE YOUR RESPONSES! THIS PROJEC... See more". Below the text is a large image of a nurse in blue scrubs and a surgical mask, with the "Well-Being INITIATIVE" logo overlaid on the right side.

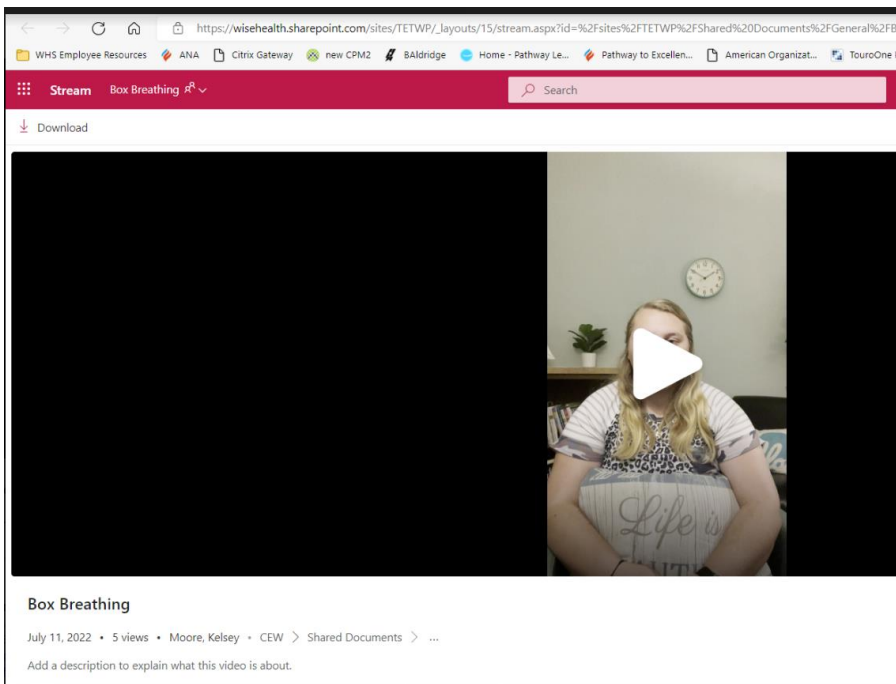
The right column contains an "About" section with a welcome message: "Welcome to the Wise Health System Facebook page for nursing! This is a fun and motivational place for all of us to connect with one another and ... See more". It lists group settings: "Private" (Only members can see who's in the group and what they post), "Visible" (Anyone can find this group), "Decatur, Texas", and "General". Below this is a "Rooms" section with four colorful icons representing different rooms and a "Create room" button. The text says: "Get the group together on video chat. Create a room to instantly connect to other members on video chat." At the bottom, there is a "Recent media" section showing a small image of the nurse and a calendar for the month of July.

Appendix Z

Mindfulness and Box Breathing Video Recording



This screenshot shows a video player interface for a file named "Brief Mindfulness.MOV". The browser address bar shows the URL: https://wisehealth.sharepoint.com/sites/TETWP/_layouts/15/stream.aspx?id=%2Fsites%2FTETWP%2FShared%20Documents%2FGeneral%2FDocuments%2FBrief%20Mindfulness.MOV. The video player shows a woman with blonde hair sitting in a chair, wearing a patterned shirt, with her hands resting on her belly. A large white play button is centered over the video. Below the video, the title "Brief Mindfulness" is displayed, followed by the date "July 11, 2022", "3 views", and the author "Moore, Kelsey". A breadcrumb trail reads "CEW > Shared Documents > ...". A description field contains the text "Add a description to explain what this video is about."



This screenshot shows a video player interface for a file named "Box Breathing.MOV". The browser address bar shows the URL: https://wisehealth.sharepoint.com/sites/TETWP/_layouts/15/stream.aspx?id=%2Fsites%2FTETWP%2FShared%20Documents%2FGeneral%2FDocuments%2FDocuments%2FBox%20Breathing.MOV. The video player shows the same woman as in the first screenshot, sitting in a chair with her hands on her belly. A large white play button is centered over the video. Below the video, the title "Box Breathing" is displayed, followed by the date "July 11, 2022", "5 views", and the author "Moore, Kelsey". A breadcrumb trail reads "CEW > Shared Documents > ...". A description field contains the text "Add a description to explain what this video is about."